

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

IN THE MATTER OF DEWEY LOEFFEL
LANDFILL SUPERFUND SITE

General Electric Company,

Respondent,

Proceeding Under Sections 104, 107 and 122 of
the Comprehensive Environmental Response,
Compensation, and Liability Act, as amended, 42
U.S.C. §§ 9604, 9607 and 9622.

US EPA Index No. CERCLA-02-2013-2030

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT
FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY OF SURFACE
DRAINAGEWAYS

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I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent for Remedial Investigation and Feasibility Study (“Settlement Agreement”) is entered into voluntarily by the United States Environmental Protection Agency (“EPA”) and General Electric Company (“GE”) (“Respondent”). The Settlement Agreement concerns the preparation and performance of a remedial investigation and feasibility study (“RI/FS”) relating to the Surface Drainageways (as defined below) at the Dewey Loeffel Landfill Superfund Site (the “Site”), located in the Town of Nassau, Rensselaer County, New York, and the reimbursement of Future Response Costs, as defined below.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (“CERCLA”), 42 U.S.C. §§ 9604, 9607 and 9622. This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (Jan. 29, 1987), and further delegated to Regional Administrators on April 15, 1994 and May 11, 1994, by EPA Delegation Nos. 14-14-C and 14-14-D, respectively. This authority was redelegated by the Regional Administrator of EPA Region 2 to the Director of the Emergency and Remedial Response Division in Region II on November 23, 2004.

3. In accordance with Sections 104(b)(2) and 122(j)(1) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9622(j)(1), EPA notified the U.S. Department of the Interior and the National Oceanic and Atmospheric Administration on July 15, 2011, of negotiations with potentially responsible parties regarding the release and threat of release of hazardous substances that may have resulted in injury to the natural resources under Federal trusteeship.

4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability, and do not prevent the identification and inclusion in the CERCLA process for this Site of any additional Potentially Responsible Parties (“PRPs”). Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact, conclusions of law and determinations in Sections V and VI of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms in any action to enforce its provisions.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent, including, but not limited to, any transfer of assets or real or personal property, shall not alter Respondent’s responsibilities under this Settlement Agreement.

6. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement.

7. The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to execute and legally bind Respondent to this Settlement Agreement.

III. STATEMENT OF PURPOSE

8. In entering into this Settlement Agreement, the objectives of EPA and Respondent are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a remedial investigation ("RI") of the Surface Drainageways (as defined below); (b) to determine and evaluate, through the conduct of a feasibility study ("FS"), alternatives for the remediation or control of any release or threatened release of hazardous substances, pollutants or contaminants at or from the Surface Drainageways at the Site; and (c) to recover certain response costs to be incurred by EPA with respect to the Site and this Settlement Agreement.

9. The Work, as defined below, conducted under this Settlement Agreement is subject to approval by EPA and shall provide all appropriate information to assess conditions relating to the Surface Drainageways and evaluate alternatives to the extent necessary to select a remedy for the Surface Drainageways at the Site that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"). Respondent shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP, and all applicable EPA guidance, policies, and procedures.

IV. DEFINITIONS

10. Unless otherwise expressly provided herein, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601-9675.

b. "Day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.

c. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXX.

d. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

e. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports, and other items pursuant to this Settlement Agreement as it relates to the Work, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Paragraph 66 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation), Paragraph 49 (emergency response), and Paragraph 97 (Work Takeover).

f. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

g. "Landfill Proper" or "LP" shall mean the 19.6-acre inactive hazardous waste disposal area at the Site and all contaminated soils associated with prior landfill operations and leachate and any other areas where contaminants may have migrated, but not including the groundwater and the Surface Drainageways.

h. "Municipal solid waste" or "MSW" shall mean waste material: (1) generated by a household (including a single or multifamily residence); or (2) generated by a commercial, industrial or institutional entity, to the extent that the waste material (i) is essentially the same as waste normally generated by a household; (ii) is collected and disposed of with other municipal solid waste as part of normal municipal solid waste collection services; and (iii) contains a relative quantity of hazardous substances no greater than the relative quantity of hazardous substances contained in waste material generated by a typical single-family household.

i. "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

j. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.

k. "Parties" shall mean EPA and Respondent.

l. "RCRA" shall mean the Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901-6991.

m. "Respondent" shall mean General Electric Company.

n. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

o. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent, all appendices attached hereto (listed in Section XXVIII) and all documents incorporated by reference into this document, including without limitation EPA-approved submissions. EPA-approved submissions (other than progress reports) are incorporated into and become a part of this Settlement Agreement upon approval by EPA. In the event of conflict between this Settlement Agreement and any appendix or other incorporated documents, this Settlement Agreement shall control.

p. "Site" shall mean the Dewey Loeffel Landfill Superfund Site located in the Town of Nassau, Rensselaer County, New York, which includes the Landfill Proper ("LP") and all areas to which contamination has migrated, including, but not limited to, the groundwater and Surface Drainageways as defined below. The Site is depicted generally on the map attached as Appendix 1.

q. "Statement of Work" or "SOW" shall mean the statement of work for implementation of the RI/FS for the Surface Drainageways at the Site which is set forth in Appendix 2 to this Settlement Agreement and any modifications made thereto in accordance with this Settlement Agreement.

r. "Surface Drainageways" shall mean the surface waterbodies at the Site, including, but not limited to, the former Mead Road Pond area, Tributary T11A, Valatie Kill, Valley Stream, Smith Pond, and Nassau Lake, and all associated surface water, sediment, soil, and any contamination thereof or migrating therefrom.

s. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

t. "Work" shall mean all activities Respondent is required to perform pursuant to this Settlement Agreement except those activities required by Section XV ("Retention of Records").

V. EPA'S FINDINGS OF FACTS

11. The Site is located in a sparsely populated area of the Town of Nassau, a rural community in Rensselaer County, New York, with a total population of approximately 4,800.

12. The LP is located in a low-lying area between two wooded hills. Topography in the area generally slopes downward from east to west. Surface water generally drains from the LP to the northwest toward Mead Road Pond. Water exiting the Mead Road Pond area flows via the T11A tributary, which in turn flows into the Valatie Kill. The Valatie Kill flows in a southwesterly direction to the northern part of Nassau Lake, approximately 2 miles downstream of the LP. The Valatie Kill then flows from the southern part of Nassau Lake and discharges into Kinderhook Lake. Surface water flowing to the southeast from the LP flows to a low-lying area and to a small unnamed tributary and then into Valley Stream which flows through Smith Pond and discharges to the southern part of Nassau Lake. Groundwater flow in the overburden soils in the

vicinity of the Site is generally to the west; in the bedrock, flows are both to the west and south. Groundwater flows to the south are influenced by the presence of fractures within the bedrock.

13. From approximately 1952 to 1968, the LP was operated by Richard Loeffel (until his death in 1959), his son Dewey Loeffel, and companies owned by the Loeffels, including, but not limited to, Loeffel's Waste Oil and Removal Service Company, Inc., and Marcar Oil, Inc. (hereinafter referred to as "Loeffel Companies"). The LP included lower (1 acre) and upper (5 acres) lagoons in the western and central portion of the LP, a 25-by 150-foot, 6-foot deep oil pit in the east central part of the LP, four 30,000-gallon above-ground oil storage tanks, and a drum disposal area located in the southern and eastern portions of the LP.

14. On information and belief: (i) Approximately 46,000 tons of industrial and/or hazardous waste were transported to and disposed of at the Site by the Loeffel Companies. The waste included, but was not limited to, solvents containing volatile organic compounds ("VOCs"), waste oils, sludges, and liquid and solid resins; (ii) of the 46,000 tons of industrial and/or hazardous waste sent to the Site, approximately 37,500 tons were sent by GE, 8,250 tons were sent by Schenectady Chemicals, Inc. (now SI Group, Inc.), and 561 tons were sent by Bendix Corporation (now Honeywell International Inc. ["Honeywell"]); and (iii) the industrial and/or hazardous waste sent by Respondent, SI Group, and Honeywell to the Site contained, among other things, hazardous substances such as polychlorinated biphenyls ("PCBs") and/or VOCs including, benzene, toluene, xylene, methyl ethyl ketone, trichloroethylene ("TCE"), chlorobenzene, 1,2 dichlorobenzene, 1,4 dichlorobenzene, 1,1 dichlorethane, 1,2 dichloroethylene, and/or vinyl chloride.

15. On information and belief: during disposal operations, hazardous substances were reportedly collected in 55 gallon drums and transported to the Site. The contents of reusable drums were dumped either into the oil pit or into the upper lagoon. Unusable drums were dumped either on the perimeter of the upper lagoon or in a drum disposal area. Drums were later covered with soil. The pit was used to store and/or separate recyclable oily wastes. The non-recyclable contents were pumped into the lagoon or onto the ground surface. Waste materials were reportedly also burned during facility operations. Hazardous substances have migrated from the LP to, among other things, the underlying aquifer resulting in contamination of ground water.

16. In 1968, after several years of citizen complaints, documented downstream fish and cattle kills, and uncontrolled fires at the facility, the State of New York ("State") ordered Dewey Loeffel and the Loeffel Companies to stop discharges from the LP and perform remedial activities including covering and grading contaminated areas and controlling drainage around the LP. These measures were conducted by Dewey Loeffel and the Loeffel Companies at some time between 1970 and 1975.

17. On September 23, 1980, GE entered into an agreement with the New York State Department of Environmental Conservation ("NYSDEC") which required GE to perform field investigations, submit an engineering report which discussed the collected data, identify alternative remedial programs and recommend a remedial program from among the alternatives. The remedial program was subsequently approved by NYSDEC and included a low permeable

cap with vegetative cover, surface water drainage swales, a perimeter cutoff wall extended to the bedrock and a leachate collection system. Pursuant to the 1980 agreement, GE paid NYSDEC approximately \$2.33 million, representing GE's share, as determined by NYSDEC, of NYSDEC's costs to implement the approved remedial program and long-term maintenance and monitoring at the LP. Subsequently Honeywell executed an agreement with NYSDEC pursuant to which it also contributed monies to defray a portion of the NYSDEC's anticipated remedial construction, maintenance and monitoring costs at the LP. In addition, after a decision by the New York State Appellate Division in *State v. Schenectady Chemicals, Inc.*, 479 N.Y.S.2d 1010 (N.Y. App. Div. 1984), in which the Court stated Schenectady Chemicals, Inc.'s (now SI Group, Inc.'s) share, as determined by NYSDEC, Schenectady Chemicals, Inc. entered into a Consent Judgment with the State, pursuant to which it paid \$496,000, representing its share of NYSDEC's costs to implement its remedial program and long-term maintenance and monitoring at the LP.

18. Beginning in 1983, NYSDEC and/or GE has performed a variety of response actions at the Site, some of which were performed in accordance with two Records of Decisions ("RODs") issued by NYSDEC under State law. Such response actions included, but were not limited to, the installation of a clay cap and soil/bentonite clay slurry wall at the LP, the removal of drums and storage tanks, the installation and operation of a bedrock groundwater recovery well system, monitoring and maintenance of residential well treatment systems, off-Site disposal of extracted contaminated groundwater and leachate and removal of contaminated sediments. NYSDEC designed, but did not construct a new leachate collection system and began the design of a wastewater treatment facility in accordance with a Record of Decision issued by NYSDEC under State law.

19. At the request of NYSDEC, EPA proposed the Site for listing on the National Priorities List ("NPL") established pursuant to Section 105 of CERCLA, 42 U.S.C. §9605, by publication in the *Federal Register* on March 4, 2010, 75 *Fed. Reg.* 9843. The Site was listed on the NPL on March 10, 2011.

20. A VOC groundwater plume has been identified extending from the LP to the south approximately to the vicinity of Central Nassau Road. Benzene and TCE are the primary contaminants within the downgradient groundwater plume.

21. From April 2011 to April 2012, EPA conducted an Initial Supplemental Site Investigation ("ISSI") at the Site which included the performance of various subsurface investigations of the LP, an assessment of the landfill cap, an infiltration study, and the installation of five groundwater boreholes to further assess the contaminated groundwater plume. The ISSI indicated the cap is operating as originally designed (i.e., to impede or divert the majority of rainfall and snowmelt from passing through the cap and into the lower disposal area (the area immediately below the cap). Soil saturation data does, however, suggest some water is infiltrating through the cap. In addition, the ISSI identified the following: the cap as constructed does not include an underlying synthetic flexible membrane layer or a precipitation drainage layer; four anomalies or areas consistent with buried metal in the south and south-central portions of the Site; and evidence of visual contamination encountered at depth at several soil boring locations. The groundwater portion of the ISSI revealed that state and federal drinking

water standards for VOCs were exceeded in all five EPA boreholes. The ISSI also indicated that the existing monitoring well system and EPA's boreholes installed during the ISSI have not fully defined the horizontal and vertical extent of the contaminated groundwater plume and that additional groundwater studies are necessary.

22. Currently four residential wells (located on three properties) to the south of the LP have been impacted by Site contaminants. Four additional residential wells are located within 300-1,000 feet from the edge of the contaminant plume. Groundwater in the vicinity of the edge of the plume flows generally to the south and southwest, towards these four additional residential wells.

23. The current groundwater extraction system was constructed by NYSDEC in an effort to intercept significant volumes of contaminants emanating from the LP, reducing the contaminant concentration at the leading edge of the contaminant plume. Data collected in 2010 revealed that the extracted groundwater contained concentrations up to 51,800 ppb of VOCs, including benzene concentrations as high as 8,100 ppb and TCE concentrations as high as 35,000 ppb.

24. On August 15, 2011, EPA Region 2's Director of the Emergency and Remedial Response Division signed an Action Memorandum authorizing and funding a removal action at the Site which consists of the continued operation (pumping) and maintenance of the groundwater extraction wells which NYSDEC had been operating, winterization of the extraction well system and the associated frac tank to allow for continuous year round operation of the wells, and the disposal of the collected leachate and groundwater, also previously being performed by NYSDEC, in order to prevent impacts to additional residential supply wells.

25. On April 16, 2012, a Settlement Agreement and Order on Consent for the performance of a removal action at the Site ("Removal Order") between EPA, Respondent and SI Group, Inc. became effective which requires Respondent and SI Group, Inc. to take over the year-round pumping of the leachate collection system and groundwater extraction wells, dispose of the collected leachate and groundwater off-Site until such time that an on-Site treatment plant can be constructed and approved by EPA and subsequently operated by Respondent and SI Group, Inc. for the treatment of the extracted contaminated groundwater and collected leachate.

26. On September 30, 2013, EPA, Respondent and SI Group, Inc. entered into a settlement agreement which requires Respondent and SI Group, Inc. to perform an RI/FS for the Landfill Proper and groundwater at the Site, excluding the Surface Drainageways, and to pay certain response costs including past response costs.

27. VOCs, including benzene, toluene, xylene, methyl ethyl ketone, TCE, chlorobenzene, 1,2 dichlorobenzene, 1,4 dichlorobenzene, 1,1 dichloroethane, 1,2 dichloroethylene, and/or vinyl chloride, and PCBs are "hazardous substances" within the meaning of Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

28. The discharge, dumping and/or disposal of hazardous substances at the Site constitutes a "release" of hazardous substances into the environment as the term "release" is defined in

Section 101(22) of CERCLA, 42 U.S.C. § 9601(22). In addition, there is a threat of further releases of hazardous substances at and from the Site.

29. Exposure to the various hazardous substances present at the Site by direct contact, ingestion or inhalation may cause a variety of adverse human health effects.

30. There is a threat of migration of the hazardous substances present at the Site which might further impact groundwater, surface water, and the surrounding environment through, for example, surface water run-off and/or percolation of rain and melting snow through contaminated soil.

VI. EPA'S CONCLUSIONS OF LAW AND DETERMINATIONS

Based on EPA's Findings of Fact set forth above, EPA has determined that:

31. The Site constitutes a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

32. The discharge, dumping and/or disposal of hazardous substances at the Site constitutes a "release" of hazardous substances into the environment as the term "release" is defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22). In addition, there is a threat of further releases of hazardous substances at and from the Site.

33. EPA alleges that Respondent is a responsible party with respect to the Site within the meaning of Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), because Respondent arranged for the disposal or treatment of hazardous substances at the Site within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. §9607(a)(3).

34. Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

35. Respondent has been given an opportunity to discuss with EPA the basis for issuance of this Settlement Agreement and its terms.

36. The actions required by this Settlement Agreement are necessary to protect the public health or welfare or the environment, are in the public interest, and are consistent with CERCLA and the NCP and are expected to expedite effective remedial action.

37. EPA has determined that Respondent is qualified to conduct the RI/FS pursuant to this Settlement Agreement within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondent complies with the terms of this Settlement Agreement.

VII. NOTICE

38. By providing a copy of this Settlement Agreement to NYSDEC, EPA is notifying the State that this Settlement Agreement is being issued and that EPA is the lead agency for coordinating, overseeing, and enforcing the response actions required by this Settlement Agreement.

VIII. SETTLEMENT AGREEMENT AND ORDER

39. Based upon the foregoing Findings of Fact and Conclusions of Law, it is hereby agreed and ordered that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all appendices to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

IX. WORK TO BE PERFORMED

40. Selection of Contractors, Personnel. All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Respondent has proposed, and EPA has approved, the use of ARCADIS of New York, Inc., as a contractor for the Work to be performed under this Settlement Agreement. Within thirty (30) days of the Effective Date of this Settlement Agreement, and before the Work outlined below begins, Respondent shall notify EPA in writing of the names, titles, and qualifications of the personnel, including contractors (other than ARCADIS of New York, Inc.), subcontractors, consultants, and laboratories, to be used in carrying out the Work; provided that if particular contractors, subcontractors, consultants, and/or laboratories are not known within thirty (30) days after the Effective Date, they shall be identified to EPA as soon as practicable after they are retained but no later than ten (10) days prior to commencement of the Work which they are proposed to perform. With respect to any proposed contractor, Respondent shall demonstrate that the proposed contractor has a quality system which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995, or most recent version), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001 or subsequently issued guidance) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements. This Settlement Agreement is contingent on Respondent's demonstration to EPA's satisfaction that Respondent is qualified to perform properly and promptly the actions set forth in this Settlement Agreement. If EPA disapproves in writing of any person's technical qualifications, Respondent shall notify EPA of the identity and qualifications of the proposed replacements within fourteen (14) days of the written notice or such other time as is agreed to by EPA. If EPA subsequently disapproves of the proposed replacement, EPA reserves the right to terminate this Settlement Agreement and to conduct a complete RI/FS, and to seek reimbursement of costs and penalties from Respondent. During the course of the RI/FS, Respondent shall notify EPA in writing of any changes or additions in the personnel used to carry out such Work, providing its names, titles, and

qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.

41. Respondent has selected, and EPA has approved, Paul W. Hare of Respondent as Respondent's Project Coordinator for the Work required under this Settlement Agreement. The Project Coordinator shall be responsible for administration of all actions by Respondent required by this Settlement Agreement. To the greatest extent possible, the Project Coordinator shall be readily available during Site Work. EPA retains the right to disapprove of the designated Project Coordinator. Respondent shall have the right to change its Project Coordinator, subject to EPA's right to disapprove. Respondent shall notify EPA ten (10) days before such a change is made, by providing EPA with the replacement Project Coordinator's name, address, telephone number, and qualifications. The initial notification may be made orally, but shall be promptly followed by a written notification. If EPA disapproves a proposed Project Coordinator, Respondent shall propose a different Project Coordinator and shall notify EPA of that person's name, address, telephone number and qualifications within fourteen (14) days following EPA's disapproval, and Respondent shall continue to propose Project Coordinators until EPA approves of one. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondent.

42. EPA has designated the following individual as its Project Coordinator with respect to the Site:

Ben Conetta, Remedial Project Manager
U.S. Environmental Protection Agency, Region II
290 Broadway, 19th Floor
New York, NY 10007
212-637-3030
conetta.benny@epa.gov

EPA will notify Respondent of any change of its designated Project Coordinator. Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to EPA's Project Coordinator.

43. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager ("RPM") and On-Scene Coordinator ("OSC") by the NCP. In addition, EPA's Project Coordinator shall have the authority, consistent with the NCP, to halt any Work required by this Settlement Agreement, and to take any necessary response action when he determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA Project Coordinator from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.

44. The tasks that Respondent must perform and the schedule for their performance are provided in the SOW. The SOW is incorporated into and an enforceable part of this Settlement Agreement. Respondent shall perform the Work in accordance with the schedules, standards, specifications, and other requirements of the RI/FS Work Plan, a deliverable of the SOW, as

initially approved by EPA, and as it may be amended or modified by EPA prior to completion of the RI/FS and shall comply with all other requirements of this Settlement Agreement.

45. Community Involvement Plan. EPA will prepare a community involvement plan, in accordance with EPA guidance and the NCP. Respondent shall cooperate with EPA in providing information relating to Work to the public. As requested by EPA, Respondent shall provide information supporting EPA's community involvement plan and shall participate in the preparation of such information for dissemination to the public and in public meetings which may be held or sponsored by EPA.

46. Modification of the RI/FS Work Plan.

a. If at any time during the RI/FS process, Respondent identifies a need for additional data, Respondent shall submit a memorandum documenting the need for additional data to the EPA Project Coordinator within twenty-one (21) days of identification. EPA in its discretion will determine whether the additional data will be collected by Respondent and whether it will be incorporated into plans, reports, and other deliverables.

b. In the event of an immediate threat or unanticipated or changed circumstances at the Site, Respondent shall notify the EPA Project Coordinator by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the immediate threat or the unanticipated or changed circumstances warrant changes in the RI/FS Work Plan to protect human health or the environment or to accomplish the objectives of the RI/FS, EPA will modify or amend the RI/FS Work Plan in writing accordingly. Respondent shall implement the RI/FS Work Plan as modified or amended.

c. EPA may determine that, in addition to tasks defined in the initially-approved RI/FS Work Plan, other additional Work may be necessary to accomplish the objectives of the RI/FS. Respondent agrees to perform these response actions in addition to those required by the initially approved RI/FS Work Plan, including any approved modifications, if EPA determines that such actions are necessary for a complete RI/FS.

d. Respondent shall confirm its willingness to perform the additional Work in writing to EPA within seven (7) days of receipt of the EPA request. If Respondent objects to any modification determined by EPA to be necessary pursuant to this Paragraph, Respondent may seek dispute resolution pursuant to Section XVI (Dispute Resolution). The RI/FS Work Plan shall be modified in accordance with the final resolution of the dispute.

e. Respondent shall complete the additional Work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the RI/FS Work Plan or written RI/FS Work Plan supplement. EPA reserves the right to conduct the Work itself at any point in accordance with Paragraph 97, to seek reimbursement from Respondent, and/or to seek any other appropriate relief.

f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at the Site.

47. Off-Site Shipment of Waste Material. Prior to any off-Site shipment of Waste Material from the Site to an out-of-state waste management facility, Respondent shall provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to EPA's Designated Project Coordinator. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

a. Respondent shall include in the written notification the following information: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Respondent shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state or to a facility in another state.

b. The identity of the receiving facility and state will be determined by Respondent following the award of the contract for the remedial investigation and feasibility study. Respondent shall provide the information required by Subparagraphs 47.a. and 47.c. as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

c. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-Site location, Respondent shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent shall only send hazardous substances, pollutants, or contaminants from the Site to an off-Site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

48. Meetings. With reasonable notice, Respondent shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics may include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

49. Emergency Response and Notification of Releases.

a. In the event of any action or occurrence arising from or relating to Respondent's performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action to prevent, abate, or minimize such release or endangerment caused or threatened by the release. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement and SOW, including, but not limited to, the Health and Safety Plan. Respondent shall also immediately notify the EPA Project Coordinator at (212) 637-3030 (or, in the event of his unavailability, the Chief of the Response and Prevention Branch of the Emergency and Remedial Response Division of EPA Region 2 at (732) 321-6656) of this or any incident or Site conditions causing a release or threat of release during the performance of the

Work whether arising from the Work or not. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XIX (Payment of Response Costs).

b. Nothing in the preceding Paragraph shall be deemed to limit any authority of the United States to take, direct, or order all appropriate action to protect human health and the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances on, at, or from the Site.

c. Upon the occurrence of any event during performance of the Work required hereunder which, pursuant to Section 103 of CERCLA, requires reporting to the National Response Center, Respondent shall immediately orally notify the EPA Project Coordinator (or, in the event of the unavailability of the EPA Project Coordinator, the Chief of the Response and Prevention Branch of the Emergency and Remedial Response Division of EPA Region 2 at (732) 321-6656) of the incident or Site conditions, in addition to the reporting required by Section 103 of CERCLA, 42 U.S.C. § 9603. Within fourteen (14) days of the onset of such an event, Respondent shall also furnish EPA with a written report setting forth the events which occurred and the measures taken, and to be taken, in response thereto. The reporting requirements of this Paragraph are in addition to, not in lieu of, reporting under Section 103 of CERCLA, 42 U.S.C. § 9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

X. NOTIFICATION AND REPORTING REQUIREMENTS

50. Monthly Progress Reports. Until the completion of the Work as provided in Paragraph 125 below, Respondent shall prepare and provide EPA with written monthly progress reports which: (1) describe the actions which have been taken toward achieving compliance with this Settlement Agreement during the previous month; (2) include all results of sampling, tests, modeling, and all other data (including raw data) received or generated by or on behalf of Respondent during the previous month in the implementation of the Work required hereunder; (3) describe all actions, data, and plans which are scheduled for the next two months and provide other information relating to the progress of Work as is customary in the industry; and (4) include information regarding percentage of completion, all delays encountered or anticipated that may affect the future schedule for completion of the Work required hereunder, and a description of all efforts made to mitigate those delays or anticipated delays. These progress reports shall be submitted to EPA by Respondent by the fifteenth (15th) day of every month following the effective date of this Settlement Agreement.

51. All work plans, reports, notices, and other documents required to be submitted to EPA under this Settlement Agreement shall be sent by certified mail, return receipt requested, by overnight delivery, or by courier to the following addressees:

1 hard copy (bound), 1 loose leaf copy, and 3 electronic copies:

U.S. Environmental Protection Agency, Region II
Emergency and Remedial Response Division

New York Remediation Branch
290 Broadway, 20th Floor
New York, NY 10007
ATTN: Dewey Loeffel Superfund Site Project Manager

1 electronic copy:

U.S. Environmental Protection Agency, Region II
Office of Regional Counsel
New York/Caribbean Superfund Branch
290 Broadway, 17th Floor
New York, NY 10007
ATTN: Dewey Loeffel Superfund Site Attorney

1 electronic copy:

New York State Department of Environmental Conservation
Division of Environmental Remediation -- Remedial Bureau B
625 Broadway, 12th Floor
Albany, NY 12233-7016
ATTN: Michael Komoroske, Environmental Engineer 3

All electronic copies shall be in a copyable and searchable format. Upon EPA's request, Respondent shall submit additional hard copies of large, odd sized, or hard to reproduce files, figures, documents or other deliverables that Respondent is required to submit.

52. Respondent shall give EPA at least fourteen (14) days advance notice of all field work or field activities to be performed by Respondent pursuant to this Settlement Agreement, unless otherwise agreed to by EPA, in its sole discretion.

XI. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

53. After review of any plan, report, or other item that is required to be submitted for approval pursuant to this Settlement Agreement, in a notice to Respondent EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondent modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Respondent at least one notice of deficiency and an opportunity to cure within 30 days or as otherwise provided in the SOW, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

54. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 53.a, b, c, or e, Respondent shall proceed to take any action required by the plan, report, or other deliverable, as approved or modified by EPA, subject only to its right to invoke the Dispute Resolution procedures set forth in Section XVI (Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a

submission or portion thereof, Respondent shall not thereafter alter or amend such submission or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Paragraph 53.c and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties).

55. Resubmission.

a. Upon receipt of a notice of disapproval, Respondent shall, within 30 days, or as provided in the SOW, or such longer time as otherwise specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the resubmission, as provided in Section XVII, shall accrue during the 30-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 56 and 57, respectively.

b. Notwithstanding the receipt of a notice of disapproval, Respondent shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. Implementation of any non-deficient portion of a submission shall not relieve Respondent of any liability for stipulated penalties under Section XVI (Stipulated Penalties).

c. Respondent shall not proceed with any activities or tasks dependent on the following deliverables until receiving EPA approval, approval on condition, or modification of such deliverables: RI/FS Work Plan, Quality Assurance Project Plan (“QAPP”) including Sampling Analysis Plan (“SAP”) if necessary, RI/FS Work Plan Addendum, Cultural Resources Survey Work Plan (if necessary), Treatability Studies Work Plan (if necessary), Baseline Human Health Risk Assessment (“BHHRA”), Pathway Analysis Report (“PAR”), Screening Level Ecological Risk Assessment (“SLERA”), Baseline Ecological Risk Assessment (“BERA”), Remedial Investigation Report, and Feasibility Study Report. While awaiting EPA approval, approval on condition, or modification of these deliverables, Respondent shall proceed with all other tasks and activities that may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement Agreement.

d. For all remaining deliverables not listed above in Paragraph 55.c., Respondent shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop Respondent from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS.

56. If EPA disapproves a resubmitted plan, report, or other deliverable, or portion thereof, EPA may again direct Respondent to correct the deficiencies. EPA shall also retain the right to modify or develop the plan, report, or other deliverable. Respondent shall implement any such plan, report, or deliverable as corrected, modified, or developed by EPA, subject only to Respondent’s right to invoke the procedures set forth in Section XV (Dispute Resolution).

57. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, Respondent shall be deemed to have failed to submit such plan,

report, or other deliverable timely and adequately unless Respondent invokes the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified, or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI.

58. In the event that EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondent shall incorporate and integrate information supplied by EPA into the final reports.

59. All plans, reports, and other deliverables submitted to EPA under this Settlement Agreement shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.

60. Neither failure of EPA to expressly approve or disapprove of Respondent's submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for Respondent's deliverables, Respondent is responsible for preparing deliverables acceptable to EPA.

XII. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION

61. Quality Assurance. Respondent shall assure that Work performed, samples taken, and analyses conducted conform to the requirements of the RI/FS SOW, RI/FS Work Plan, QAPP required by the RI/FS Work Plan, any addenda to those plans, and guidance identified in those plans. Respondent shall assure that field personnel used by them are properly trained in the use of field equipment and in chain of custody procedures. Respondent shall only use laboratories which have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001), or equivalent documentation as determined by EPA.

62. Sampling.

a. All results of sampling, tests, modeling, or other data (including raw data) generated by Respondent, or on Respondent's behalf, during the period that this Settlement Agreement is effective shall be submitted to EPA in the next monthly progress report following receipt of such data as described in Paragraph 50 of this Settlement Agreement. EPA will make available to Respondent validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation. Data will also be available to EPA, upon receipt from the lab, if requested by EPA. Data will be submitted in a useable database format consistent with the

Region 2 Electronic Data Deliverable (EDD) format (information available at www.epa.gov/region02/superfund/medd.htm).

b. At EPA's verbal or written request, or the request of EPA's oversight contractor, Respondent shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) of any samples collected in implementing this Settlement Agreement. Any split samples of Respondent which are analyzed will be analyzed by the methods identified in the QAPP.

63. Access to Information.

a. Respondent shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to Work activities at the Site or the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

b. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when it is submitted to EPA, or if EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent. Respondent shall segregate and clearly identify all documents or information submitted under this Settlement Agreement for which Respondent asserts business confidentiality claims.

c. Respondent may assert that certain documents, records, and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondent. However, notwithstanding the above, no documents, reports, or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or

engineering data, or any other documents or information evidencing conditions at or around the Site.

64. In entering into this Settlement Agreement, Respondent agrees to waive any objections to any data gathered, generated, or evaluated by EPA or Respondent in the performance or oversight of the Work that has been verified according to the quality assurance/quality control (“QA/QC”) procedures required pursuant to this Settlement Agreement or any EPA-approved RI/FS Work Plans. If Respondent objects to any other data relating to the RI/FS, Respondent shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within fifteen (15) days of the monthly progress report containing the data.

XIII. SITE ACCESS

65. To the extent that the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by Respondent, Respondent shall, commencing on the Effective Date, provide EPA and its representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.

66. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use best efforts to obtain all necessary access agreements within forty-five (45) days after the Effective Date, after the need for access arises, or as otherwise specified in writing by the EPA Project Coordinator. Respondent shall immediately notify EPA if after using best efforts it is unable to obtain such agreements. For purposes of this Paragraph, “best efforts” includes the payment of reasonable sums of money in consideration of access. Respondent shall describe in writing its efforts to obtain access. If Respondent cannot obtain access agreements, EPA may either (i) obtain access for Respondent or assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate; (ii) perform those tasks or activities with EPA contractors; or (iii) terminate the Settlement Agreement. Respondent shall reimburse EPA for all costs and attorney’s fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XIX (Payment of Response Costs). If EPA performs those tasks or activities with EPA contractors and does not terminate the Settlement Agreement, Respondent shall perform all other tasks or activities not requiring access to that property, and Respondent shall reimburse EPA for all costs incurred in performing such tasks or activities. Respondent shall integrate the results of any such tasks or activities undertaken by EPA into its plans, reports, and other deliverables.

67. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIV. COMPLIANCE WITH OTHER LAWS

68. Respondent shall comply with all applicable local, state, and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-site and requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain and comply with all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XV. RETENTION OF RECORDS

69. During the pendency of this Settlement Agreement and for a minimum of 10 years after commencement of construction of any remedial action, Respondent shall preserve and retain all non-identical copies of documents, records, and other information (including documents, records, or other information in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 10 years after commencement of construction of any remedial action, Respondent shall also instruct its contractors and agents to preserve all documents, records, and other information of whatever kind, nature, or description relating to performance of the Work.

70. At the conclusion of this document retention period, Respondent shall notify EPA at least ninety (90) days prior to the destruction of any such documents, records, or other information, and, upon request by EPA, Respondent shall deliver any such documents, records, or other information to EPA. Respondent may assert that certain documents, records, and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA with the following: 1) the title of the document, record, or other information; 2) the date of the document, record, or other information; 3) the name and title of the author of the document, record, or other information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or other information; and 6) the privilege asserted by Respondent. However, notwithstanding the above, no documents, records or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

71. Respondent hereby certifies that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any records, documents, or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA, and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e).

XVI. DISPUTE RESOLUTION

72. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

73. Notwithstanding any other provision of this Settlement Agreement, Respondent may not invoke the dispute resolution procedures of this Section more than once regarding the same issue. For example, if Respondent invokes the dispute resolution procedures with respect to an issue raised by EPA's comments on the RI Report, and said issue is resolved under this Section, Respondent may not invoke the dispute resolution procedures with respect to the same issue later, in the context of EPA's comments on the FS Report.

74. If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, it shall notify EPA in writing of its objection(s) within fourteen (14) days of such action or, in the case of billings for Future Response Costs, twenty-one (21) days of receipt of such bill, unless the objection(s) has/have been resolved informally. EPA and Respondent shall have fourteen (14) days from EPA's receipt of Respondent's written objection(s) to resolve the dispute (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Such extension may be agreed to verbally but must be confirmed in writing.

75. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, Respondent may, within ten (10) days of the conclusion of that period, request a determination on the matter in dispute by the Director of the Emergency and Remedial Response Division, EPA Region 2 (the "ERRD Director"). Such a request shall be made in writing. The ERRD Director will issue a written decision on the matter in dispute. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. The invocation of dispute resolution under this Section shall not extend, postpone, or affect in any way any of Respondent's obligations under this Settlement Agreement that are not directly in dispute, unless EPA agrees otherwise. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs, and regardless of whether Respondent agrees with the decision.

XVII. STIPULATED PENALTIES

76. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 77 and 78 for failure to comply with any of the requirements of this Settlement Agreement specified below unless excused under Section XVII (Force Majeure). "Compliance" by Respondent shall include completion of the Work under this Settlement Agreement or any activities contemplated under any RI/FS Work Plan or other plan approved under this Settlement Agreement identified below, in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved by EPA pursuant

to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

77. For all violations of this Settlement Agreement, except as provided in Paragraph 78 below, stipulated penalties shall accrue as follows:

Penalty Per Violation Per Day	Period of Noncompliance
\$ 1,000	1 st through 7 th day
\$ 1,500	8 th through 15 th day
\$ 3,000	16 th through 28 th day
\$ 7,000	29 th day and beyond

78. For the monthly progress reports required pursuant to Paragraph 50 above, stipulated penalties shall accrue in the amount of \$500 per day, per violation, for the first week of noncompliance; \$1,000 per day, per violation, for the 8th through 15th day of noncompliance; \$2,000 per day, per violation, for the 16th day through the 28th day of noncompliance; and \$4,000 per day, per violation, for the 29th day of noncompliance and beyond.

79. In the event that EPA assumes performance of the remaining Work pursuant to Paragraph 97 (Work Takeover), Respondent shall be liable for a stipulated penalty in the amount of \$600,000.

80. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Section X (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 22nd day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and (b) with respect to a decision by the EPA management official designated in Paragraph 75 of Section XV (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA management official issues a final decision regarding such dispute. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

81. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the same and describe the noncompliance. EPA may send Respondent a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation.

82. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XV (Dispute Resolution). Respondent shall make all payments required by this Paragraph to EPA by Fedwire Electronic Funds Transfer to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York NY 10045
Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental
Protection Agency"

and shall reference stipulated penalties, Site/Spill ID Number A2-23, and the EPA docket number for this action.

At the time of payment, Respondent shall send notice that payment has been made as provided in Paragraph 90 below.

83. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.

84. Penalties shall continue to accrue as provided in Paragraph 80 during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's decision.

85. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 82.

86. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement Agreement, except in the case of willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX (Reservation of Rights by EPA), Paragraph 97. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XVIII. FORCE MAJEURE

87. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by an event which constitutes *force majeure*. For purposes of this Settlement Agreement, a *force majeure* event is defined as any event arising from causes beyond the control of Respondent or of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. A *force majeure* event does not include financial inability to perform the Work or increased cost of performance.

88. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify EPA orally within 48 hours of when Respondent first knew or should have known that the event might cause a delay. Within seven (7) days thereafter, Respondent shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to be a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare, or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

89. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. However, EPA shall take into consideration the effect of the extension of time granted in connection with Respondent's performance of its overall obligations under the RI/FS Work Plan, and shall modify as warranted, if necessary. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XIX. PAYMENT OF RESPONSE COSTS

90. Payments of Future Response Costs. Respondent shall reimburse EPA for all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondent a bill or bills requiring payment that includes a printout of cost data in EPA's financial management system. Respondent shall, within thirty (30) days of receipt of each such billing, remit payment of the billed amount via Electronic Funds Transfer ("EFT") at Federal Reserve Bank of New York. To make payment via EFT, Respondent shall provide the following information to its bank:

- i. Amount of payment:
- ii. EFT to be directed to: **Federal Reserve Bank of New York**
- iii. ABA Routing Number: **021030004**
- iv. Federal Reserve Bank of New York account number: **68010727**
- v. SWIFT address: **FRNYUS33**
- vi. Address: **Federal Reserve Bank of New York
33 Liberty Street
New York, NY 10045**
- vii. Field Tag 4200 of the Fedwire message to read: **D 68010727
Environmental Protection Agency**
- viii. Name of remitter: **General Electric Company**
- ix. Settlement Agreement Index Number: **CERCLA-02-2013-2030**
- x. Site/spill identifier: **A2-23**

Along with this information, Respondent shall instruct its bank to remit payment in the required amount via EFT to EPA's account with Federal Reserve Bank of New York. To ensure that Respondent's payments are properly recorded, Respondent shall send a letter to EPA within one week of the EFT, which references the date of the EFT, the payment amount, the name of the Site, the Index Number of this Settlement Agreement, and Respondent's name and address. Such letter shall be sent to the EPA addressees listed in Paragraph 51 above and to:

Chief, Financial Management Branch
U.S. Environmental Protection Agency, Region II
290 Broadway, 22nd Floor
New York, New York 10007-1866

91. The total amounts to be paid by Respondent pursuant to Paragraph 90 above shall be deposited in the Dewey Loeffel Landfill Site Special Account within the EPA Hazardous Substance Superfund, to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

92. If Respondent does not pay Future Response Costs within thirty (30) days of Respondent's receipt of a bill, Respondent shall pay Interest. The Interest on unpaid Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. If EPA receives a partial payment, Interest shall accrue on any unpaid balance. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including, but not limited to, payments of stipulated penalties pursuant to Section XVII. Respondent shall make all payments required by this Paragraph in the manner described in Paragraph 90.

93. Respondent may contest payment of any Future Response Costs required under Paragraph 90, if it believes that EPA has made a mathematical error, has included costs which are outside the scope of the definition of Future Response Costs, or has incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP. Such objection shall be made

in writing within fourteen (14) days of receipt of the bill and must be sent to the EPA representatives listed in Section X above. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondent shall within the 30-day period pay all uncontested Future Response Costs to EPA in accordance with the payment procedures in Paragraph 90. Simultaneously Respondent shall establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation ("FDIC"), and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the EPA Project Coordinator a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondent shall initiate the dispute resolution procedures in Section XVI (Dispute Resolution). If EPA prevails in the dispute, within ten (10) days of the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in accordance with the payment procedures in Paragraph 90. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which it did not prevail to EPA in accordance with the payment procedures in Paragraph 90. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVI (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

XX. COVENANT NOT TO SUE BY EPA

94. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work performed under this Settlement Agreement and for recovery of Future Response Costs. This covenant not to sue shall take effect upon the Effective Date of this Settlement Agreement. This covenant not to sue is conditioned upon the complete and satisfactory performance by Respondent of its obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XIX. This covenant not to sue extends only to Respondent and does not extend to any other person.

XXI. RESERVATIONS OF RIGHTS BY EPA

95. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Site. Further, except as specifically provided in this Settlement Agreement, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

96. The covenant not to sue set forth in Section XX above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:

- a. claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;
- b. liability for costs not included within the definition of Future Response Costs;
- c. liability for performance of response action other than the Work, including, but not limited to, response actions relating to the Landfill Proper and Groundwater;
- d. criminal liability;
- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
- g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

97. Work Takeover. In the event EPA determines that Respondent has ceased implementation of any portion of the Work, or is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Respondent may invoke the procedures set forth in Section XVI (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by EPA in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondent shall pay pursuant to Section XIX (Payment of Response Costs).

XXII. COVENANT NOT TO SUE BY RESPONDENT

98. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work or Future Response Costs or this Settlement Agreement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of the Work, or arising out of the response actions for which the Future Response Costs have or will be incurred, including any claim under the United States Constitution, the New York State Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or payment of Future Response Costs.

99. Claims Against De Micromis Parties. Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) or 113 of CERCLA) that it may have for all matters relating to the Work at the Site against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

100. The waiver in Paragraph 99 shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Site against Respondent. This waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines:

a. that such person has failed to comply with any EPA requests for information or administrative subpoenas issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of RCRA, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site, or has been convicted of a criminal violation for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise; or

b. that the materials containing hazardous substances contributed to the Site by such person have contributed significantly, or could contribute significantly, either individually or in the aggregate, to the cost of response action or natural resource restoration at the Site

101. Claims Against *De Minimis* and Ability to Pay Parties. Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) or 113 of CERCLA) that it may have for response costs relating to the Work at the Site against any person that in the future enters into a final Section 122(g) *de minimis* settlement, or a final settlement based on limited ability to pay, with EPA with respect to the Site as of the Effective Date. This waiver shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person if such person asserts a claim or cause of action relating to the Site against Respondent.

102. Claims Against MSW Generators and Transporters. Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) or 113 of CERCLA) that it may have for all matters relating to the Work at the Site against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of MSW at the Site, if the volume of MSW disposed, treated, or transported by such person to the Site did not exceed 0.2 percent of the total volume of waste at the Site.

XXIII. OTHER CLAIMS

103. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent.

104. Except as expressly provided in Paragraphs 99 (Claims Against *De Micromis* Parties), 101 (Claims Against *De Minimis* and Ability to Pay Parties), and 102 (Claims Against MSW Parties), and Section XX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

105. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIV. EFFECT OF SETTLEMENT/CONTRIBUTION

106. Except as provided in Paragraphs 99 (Claims Against *De Micromis* Parties), 101 (Claims Against *De Minimis* and Ability to Pay Parties), and 102 (Claims Against MSW Generators and Transporters), nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in Paragraphs 99 (Claims Against *De Micromis* Parties), 101 (Claims Against *De Minimis* and Ability to Pay Parties), and 102 (Claims Against MSW Generators and Transporters), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or

occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

107. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and that Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may be otherwise provided by law, for “matters addressed” in this Settlement Agreement. The “matters addressed” in this Settlement Agreement are the Work and Future Response Costs. The Parties further agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondent has, as of the Effective Date, resolved its liability to the United States for the Work and Future Response Costs.

108. Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement, notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement Agreement, notify EPA in writing within 10 days of service of the complaint or claim upon it. In addition, Respondent shall notify EPA within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.

109. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of EPA, for injunctive relief, recovery of response costs, or other relief relating to the Site, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, *res judicata*, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenant by EPA set forth in Section XIX.

110. Effective upon signature of this Settlement Agreement by Respondent, Respondent agrees that the time period after the date of its signature shall not be included in computing the running of any statute of limitations potentially applicable to any action brought by the United States related to the “matters addressed” as defined in Paragraph 107 and that, in any action brought by the United States related to the “matters addressed,” Respondent will not assert, and may not maintain, any defense or claim based upon principles of statute of limitations, waiver, laches, estoppel, or other defense based on the passage of time after its signature of this Settlement Agreement. If EPA gives notice to Respondent that it will not make this Settlement Agreement effective, the statute of limitations shall begin to run again commencing ninety days after the date such notice is sent by EPA.

XXV. INDEMNIFICATION

111. Respondent shall indemnify, save, and hold harmless the United States, its officials, agents, contractors, subcontractors, employees, and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.

112. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

113. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of the Work on or relating to the Site. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of the Work on or relating to the Site.

XXVI. INSURANCE

114. At least thirty (30) days prior to commencing any on-Site Work under this Settlement Agreement, Respondent shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of two million dollars, combined single limit, naming the EPA as an additional insured. Within the same period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVII. FINANCIAL ASSURANCE

115. EPA has reviewed financial documentation dated March 13, 2013 previously supplied by Respondent to EPA and is satisfied that, through March 31, 2014, Respondent has sufficient financial resources to conduct the Work. By no later than March 31, 2014, Respondent shall reestablish and maintain financial security for the benefit of EPA in an amount no less than the estimated cost of the Work to be performed by Respondent under this Settlement Agreement in one or more of the following forms, in order to secure the full and final completion of Work by Respondent:

- a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;
- b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA;
- c. a trust fund administered by a trustee acceptable in all respects to EPA;
- d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work;
- e. a written guarantee to pay for or perform the Work provided by one or more parent companies of Respondent, or by one or more unrelated companies that have a substantial business relationship with Respondent, including a demonstration that any such guarantor company satisfies the financial test requirements of 40 C.F.R. Part 264.143(f); and/or
- f. demonstration of sufficient financial resources to pay for the Work made by Respondent, which shall consist of a demonstration that Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).

116. If Respondent elects to utilize the forms provided in Paragraphs 115.e. and/or 115.f. and Respondent or guarantors have provided similar demonstration at other RCRA, CERCLA, TSCA, or other federally-regulated Sites, the amount for which Respondent is providing financial assurance at those Sites should be added to the estimated cost of the Work for purposes of determining the total dollar amount required to satisfy the requirements of 40 C.F.R. Part 264.143(f).

117. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondent shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 115, above. In addition, if at any time EPA notifies Respondent that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondent's inability to demonstrate financial

ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

118. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount initially set, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA.

119. Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section.

XXVIII. INTEGRATION/APPENDICES

120. This Settlement Agreement and its appendices and any deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), or other documents that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

“Appendix 1” is the map of the Site, identifying the Surface Drainageways.

“Appendix 2” is the Statement of Work.

XXIX. ADMINISTRATIVE RECORD

121. EPA will determine the contents of the administrative record file for selection of the remedy for one or more remedies for the Site. Respondent shall submit to EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Upon request of EPA, Respondent shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports, and other reports. Upon request of EPA, Respondent shall additionally submit any previous studies conducted under State, local, or other federal authorities relating to selection of the response action, and all communications between Respondent and the State, local, or other federal authorities concerning selection of the response action. At EPA’s request, Respondent shall establish a community information repository at or near the Site, to house one copy of the administrative record.

XXX. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

122. This Settlement Agreement shall become effective five (5) business days after the date it is signed by or on behalf of the Director of the Emergency and Remedial Response Division of EPA Region 2. All times for performance of actions or activities required herein will be calculated from said Effective Date.

123. This Settlement Agreement may be amended by mutual agreement of EPA and Respondent. Amendments shall be in writing and shall be effective when signed by the Director of the Emergency and Remedial Response Division of EPA Region 2.

124. No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

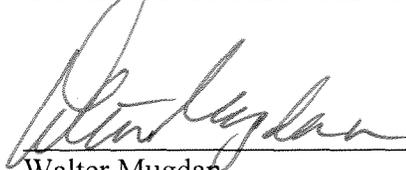
XXXI. NOTICE OF COMPLETION OF WORK

125. Upon Completion of the Work required by this Settlement Agreement, Respondent shall submit to EPA a written certification, with supporting documentation, that the Work required under this Settlement Agreement has been performed. This certification shall be signed by an authorized representative of Respondent and shall include the following statement:

“I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this document and attachments, the information contained in and accompanying this document is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fines and imprisonment for knowing violations.”

Upon a determination by EPA (following its receipt of the above-referenced certification) that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to payment of Future Response Costs (if any remain unpaid) or record retention, EPA will provide written notice to Respondent. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the RI/FS Work Plan if appropriate in order to correct such deficiencies, in accordance with Paragraph 46 (Modification of the Work Plan). In that event, Respondent shall modify the RI/FS Work Plan and implement that modified plan, subject to its right to invoke dispute resolution under Section XVI (Dispute Resolution). Failure by Respondent to implement the approved modified RI/FS Work Plan shall be a violation of this Settlement Agreement.

U.S. ENVIRONMENTAL PROTECTION AGENCY



Walter Mugdan
Director
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
Region 2

DATE: Oct. 30, 2013

Dewey Loeffel Landfill Superfund Site
Administrative Settlement Agreement on Consent, Index No. CERCLA-02-2013-2008

CONSENT

The Respondent identified below has had an opportunity to confer with EPA regarding this Settlement Agreement. Respondent hereby consents to the issuance of this Settlement Agreement and to its terms. The individual executing this Settlement Agreement on behalf of Respondent certifies under penalty of perjury under the laws of the United States that he or she is fully and legally authorized to agree to the terms and conditions of this Settlement Agreement and to bind Respondent thereto.

GENERAL ELECTRIC COMPANY

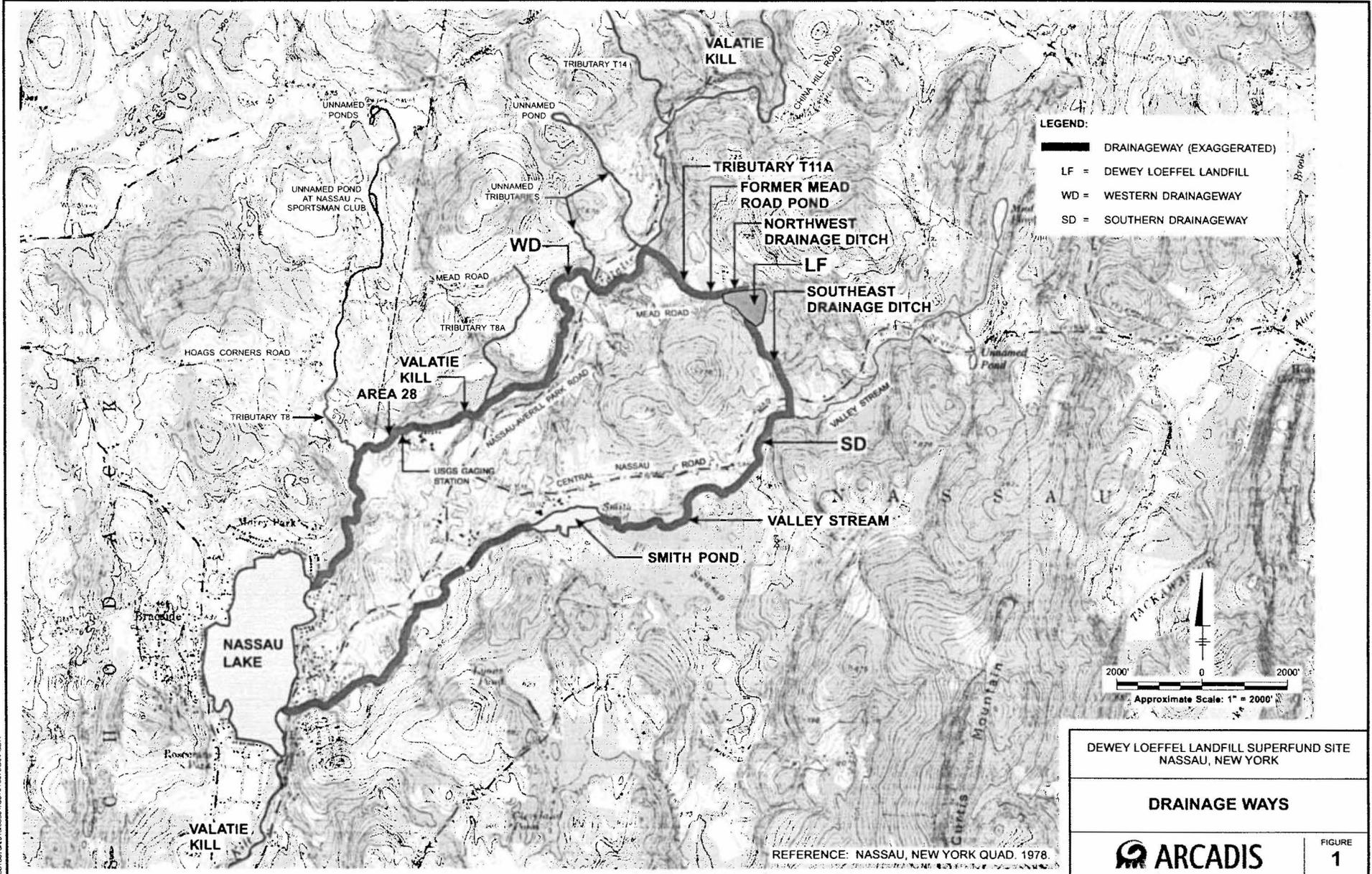
ARKL
Signature

Oct 25, 2013
Date

Ann Klee
Printed name

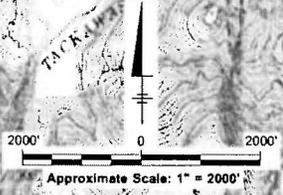
Vice President - Corp Env. Program
Title
GE

APPENDIX 1



LEGEND:

- DRAINAGE WAY (EXAGGERATED)
- LF = DEWEY LOEFFEL LANDFILL
- WD = WESTERN DRAINAGE WAY
- SD = SOUTHERN DRAINAGE WAY



DEWEY LOEFFEL LANDFILL SUPERFUND SITE
NASSAU, NEW YORK

DRAINAGE WAYS

ARCADIS

FIGURE
1

REFERENCE: NASSAU, NEW YORK QUAD. 1978.

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APPENDIX 2

APPENDIX 2

STATEMENT OF WORK FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY OF THE SURFACE DRAINAGEWAYS **DEWEY LOEFFEL LANDFILL SUPERFUND SITE** Nassau, Rensselaer County, New York

I. INTRODUCTION

A. The purpose of the remedial investigation/feasibility study (“RI/FS”) is to investigate the nature and extent of contamination in the Western and Southern Drainageways (as defined below) at the Dewey Loeffel Landfill Superfund Site (the “Site”), and develop and evaluate potential remedial alternatives for those components of the Site. The RI and FS are interactive and may be conducted concurrently so that the data collected in the RI influences the development of remedial alternatives in the FS, which in turn affects the data needs and the scope of treatability studies, if needed.

B. The Site includes the following four components:

1. Landfill (“LF”), defined as the Dewey Loeffel Landfill proper, including contaminated soils associated with prior landfill operations and leachate and any other areas where contaminants may have migrated, but not including the Groundwater, the Southern Drainageway, and the Western Drainageway, as defined below.
2. Groundwater (“GW”), defined as all groundwater contamination at the Site and any other areas where contaminants may have migrated, but not including the LF, the Southern Drainageway, and the Western Drainageway.
3. The Southern Drainageway, (“SD”) defined as the southern drainage ditch, Valley Stream, Smith Pond, and any other areas where contaminants may have migrated, but not including the GW, the LF, and the Western Drainageway.
4. Western Drainageway (“WD”), defined as the northwestern drainage ditch, former Mead Road Pond, Tributary T11A, Valatie Kill, Nassau Lake, and any other area where contaminants have migrated, but not including the LF, the GW, and the SD.

This Statement of Work (“SOW”) relates to two of these components – namely, the WD and SD (sometimes referred to jointly as the “Drainageways” or “Surface Drainageways”). All provisions of this SOW apply only to those components of the Site unless otherwise expressly provided. The RI/FS is divided into two phases. Phase 1 is intended to further refine the extent of contamination in the Surface Drainageways and to identify data needs for completion of the RI. Phase 2 will complete the investigation of the nature and extent of contamination associated with the Drainageways and develop and evaluate potential remedial alternatives.

C. The RI/FS shall be conducted in a manner that minimizes environmental impacts in accordance with EPA Region 2 Clean and Green Policy (available at www.epa.gov/region02/superfund/green_remediation/policy.html) to the extent consistent with the National Contingency Plan (NCP), 40 CFR Part 300. Respondent, the General Electric Company (“GE”), shall follow Guidance on Systematic Planning using the Data Quality Objectives Process (QA/G-4) EPA/240/B-06/001 February 2006, in planning and conducting the RI/FS.

D. Respondent shall conduct the RI/FS and shall produce RI and FS reports that are in accordance with this SOW, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (U.S. EPA, OSWER Directive # 9355.3-01, October 1988 or subsequently issued guidance), and any other guidance that EPA uses in conducting a RI/FS, as well as any additional requirements in the Administrative Settlement Agreement and Order on Consent, Index No. CERCLA-02-2013-2008 (“Settlement Agreement”). The RI/FS Guidance describes the report format and the required report content. Respondent shall furnish all necessary personnel, materials, and services needed for, or incidental to, the performance of the RI/FS, except as otherwise specified in the Settlement Agreement.

E. At the completion of the RI/FS, EPA will be responsible for the selection of the remedy for the Drainageways at the Site and will document the remedy selection in a Record of Decision (“ROD”). The remedial action alternative selected by EPA will meet the cleanup standards specified in CERCLA Section 121, 42 U.S.C. § 9621. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements of other laws (“ARARs”), will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report, as adopted by EPA, and the baseline risk assessment will, with the administrative record, form the basis for the selection of the remedy for the Site and will provide the information necessary to support the development of the ROD.

F. As specified in CERCLA Section 104(a) (1), 42 U.S.C. § 9604(a)(1), EPA will provide oversight of Respondent’s activities throughout the RI/FS. Respondent shall support EPA’s initiation and conduct of activities related to the implementation of oversight activities.

II. TASK 1 – PHASE 1 RI WORK PLAN

A. The Phase 1 RI Work Plan. By no later than January 6, 2014, or such longer time as is specified or agreed to by EPA, Respondent shall submit to EPA a work plan for the performance of Phase 1 of the RI for the WD and SD components of the Site. The Phase 1 RI Work Plan shall include a detailed description, rationale, and schedule for the first phase of the RI. The Phase 1 RI Work Plan shall include the following activities:

1. Field Reconnaissance. The performance of field reconnaissance of the WD and SD, including, but not limited to:

- a. Documentation (using field notes, photography/video, and position via Global Positioning System ["GPS"]) of relevant stream features such as riffles, depositional areas (e.g., sand bars, gravel bars), backwater areas, and evidence of bank undercutting or scour;
 - b. Identification of potential depositional areas outside of the current active drainageway channels, such as abandoned former channels and oxbows, secondary high flow channels, wetlands, and other topographic depressions within the floodplain; and
 - c. Assessment of the geomorphology of the WD and SD to aid in understanding potential migration of polychlorinated biphenyls ("PCBs") and other chemicals identified in the WD and SD and thus to guide sampling in those Drainageways.
2. Project Base Mapping and Database Work. The performance of the following for the WD and the SD, including, but not limited to:
- a. Aerial photography;
 - b. Topographic mapping conducted by a New York State-Licensed Land Surveyor; and
 - c. Development of a geographic information system ("GIS") database, including, but not limited to, property ownership and zoning, floodplain mapping up to and including the 100-year floodplain (as mapped by the Federal Emergency Management Agency ["FEMA"]) and the 500-year floodplain (if available from FEMA), results of geomorphologic survey and other field reconnaissance, wetland mapping, and soil typing.
3. Valatie Kill Sampling. The performance of the following sediment and soil sampling in and around the Valatie Kill:
- a. Sample transects across the Valatie Kill to the approximate extent of the floodplain, to better define the extent of contamination along the Valatie Kill and its floodplain and thereby focus the scope and extent of the Phase 2 investigations. The location of, and other details related to, these transects shall be specified in the Phase 1 RI Work Plan, subject to modification based on the results of the field reconnaissance and mapping described above, as approved by EPA;
 - b. Collection of surface and sub-surface samples at each transect within the Valatie Kill to the approximate extent of the floodplain, as determined by topography and FEMA mapping; and
 - c. Analysis of all samples for PCBs and total organic carbon ("TOC"), with analysis of a portion of the samples for other target compound list ("TCL") and target analyte list ("TAL") constituents, PCB congeners, dioxin, grain size, and bulk

density, with the specific percentages (which may vary for different parameters) to be determined in the Phase 1 RI Work Plan.

4. Nassau Lake Sampling. The performance of the following in Nassau Lake:
 - a. Water depth measurements and soft sediment probing at locations within the lake to obtain bathymetric and soft sediment thickness information;
 - b. Collection of surface and sub-surface sediment samples at locations within Nassau Lake to provide updated information on PCB concentrations within the lake so as to better define the additional data needs for Phase 2 of this RI/FS related to Nassau Lake;
 - c. Surface and sub-surface sediment and soil sampling at transects along the shoreline of Nassau Lake, with collection of samples from the winter low water level to the approximate extent of the floodplain, to better define the extent of PCBs along the shoreline and thereby determine the extent to which additional investigations of the shoreline will be necessary in Phase 2;
 - d. The location of, and other details related to, these measurements and samples shall be specified in the Phase 1 RI Work Plan, subject to modification based on the results of the field reconnaissance and mapping described above, as approved by EPA; and
 - e. Analysis of all samples for PCBs and TOC, with analysis of a portion of the samples for TCL/TAL constituents, PCB congeners, dioxin, grain size, and bulk density, with the specific percentages (which may vary for different parameters) to be determined in the Phase 1 RI Work Plan.

5. Southern Drainageways Sampling. The performance of the following sediment and soil sampling in the SD:
 - a. Collection of surface and subsurface soil and sediment samples in the southern drainage ditch, Valley Stream between the confluence with the southern drainage ditch and Smith Pond, Smith Pond, and Valley Stream between Smith Pond and the inlet the Nassau Lake, including samples in the current stream channel, and, if present, former stream channels, to better define the additional data needs, if necessary, for Phase 2 of this RI/FS related to the SD. The location of, and other details relating to, these samples shall be specified in the RI/FS Work Plan, subject to modification based on the results of the field reconnaissance and mapping described above, as approved by EPA; and
 - b. Analysis of all samples for PCBs and TOC, with analysis of a portion of the samples for TCL/TAL constituents, PCB congeners, dioxin, grain size, and bulk density, with the specific percentages (which may vary for different parameters) to be determined in the Phase 1 RI Work Plan.

6. Fish and Surface Water Monitoring. The continuation of Respondent's ongoing fish and surface water monitoring programs.
7. A PCB volatilization evaluation near and around Nassau Lake;
8. Data Compilation. Compilation of stream flow data in a spreadsheet table.
9. Procedures and a timetable for providing to EPA a summary and an electronic database of all sampling data, with coordinates and sampling dates, including soil, sediment, surface water, groundwater to surface water, fish, other biota, and air data. In addition, for surface water event sampling, time of collection should be included.

B. The Phase 1 RI Work Plan shall also include the following:

1. Data Management Procedures. Respondent shall consistently document the quality and validity of field and laboratory data compiled during the RI.
 - a. Document Field Activities.

Information gathered during characterization of the Site shall be consistently documented and adequately recorded by Respondent in field logs and laboratory reports. The method(s) of documentation must be specified in the Phase 1 RI Work Plan and Quality Assurance Project Plan ("QAPP"). Field logs or dedicated field log-books must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

- b. Maintain Sample Management and Tracking.

Respondent shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the risk assessment and evaluation of remedial alternatives. Analytical results developed under the Phase 1 RI Work Plan must be accompanied by, or cross-referenced to, a corresponding QA/QC report when included in the Site Characterization Summary Report ("SCSR") and SCSR Addendum for the Drainageways (described below). In addition, Respondent shall safeguard chain of custody forms and other project records to prevent loss, damage, or alteration of project documentation.

2. A Quality Assurance Project Plan ("QAPP") or update to a previously approved QAPP, which shall be prepared consistent with the Uniform Federal Policy for Quality Assurance Project Plans ("UFP-QAPP"), Parts 1, 2 and 3, EPA-505-B-04-900A, B and C, March 2005 or newer, and other guidance documents referenced in

the aforementioned guidance documents and in accordance with Section XII (Quality, Assurance, Sampling, and Access to Information) of the Settlement Agreement. The UFP documents may be found at:

http://www.epa.gov/fedfac/documents/intergov_qual_task_force.htm. In addition, the guidance and procedures located in the EPA Region 2 DESA/HWSB web site:

<http://www.epa.gov/region02/qa/documents.htm>, as well as other OSWER directives and EPA Region 2 policies shall be followed, as appropriate.

- a. All sampling and analyses performed pursuant to this Settlement Agreement shall conform to EPA policy and guidance regarding sampling, quality assurance, quality control, data validation, and chain of custody procedures. Respondent shall incorporate these procedures into the QAPP in accordance with the Uniform Federal Policy for Implementing Quality Systems (“UFP-QS”), EPA-505-F-03-001, March 2005; Uniform Federal Policy for Quality Assurance Project Plans (“UFP-QAPP”), Parts 1, 2, and 3, EPA-505-B-04-900A, B, and C, March 2005 or newer; and other guidance documents referenced in the aforementioned guidance documents. Subsequent amendments to the above, upon notification by EPA to Respondent of such amendments, shall apply only to procedures conducted after such notification.
- b. The QAPP shall provide for collection of data sufficient to meet the objectives of Phase 1 of the RI.
- c. The QAPP shall specifically include the following items:
 - i. An explanation of the way(s) the sampling, analysis, testing, and monitoring will produce data for the RI/FS;
 - ii. A detailed description of the sampling, analysis, and testing to be performed, including sampling methods, analytical and testing methods, sampling locations and frequency of sampling to be implemented to sample and analyze the contaminants found in sediment, surface water, soil, and fish, as necessary;
 - iii. A description of how sampling data and a site base map will be submitted in a manner that is consistent with the Region 2 Electronic Data Deliverable (“EDD”) format (information available at www.epa.gov/region02/superfund/medd.htm);
 - iv. A map depicting sampling locations (to the extent that these can be defined when the QAPP is prepared); and
 - v. A schedule for performance of the specific tasks in subparagraphs (c)(i)-(iii) of this Section.

- d. In the event that additional sampling locations, testing, and analyses are required or other alterations of the QAPP are required, Respondent shall submit to EPA a memorandum documenting the need for additional data to the EPA Project Coordinator within thirty (30) days of identification. EPA in its discretion will determine whether the additional data will be collected by Respondent and whether it will be incorporated into plans, reports and other deliverables.
- e. In order to provide quality assurance and maintain quality control with respect to all samples to be collected, Respondent shall ensure the following:
 - i. Quality assurance and chain of custody procedures shall be performed in accordance with standard EPA protocol and guidance, including the guidance provided in the EPA Region 2 Quality Assurance Homepage, and the guidelines set forth in this Settlement Agreement.
 - ii. Once laboratories have been chosen, each laboratory's quality assurance plan ("LQAP") shall be submitted for review by EPA. In addition, the laboratory or Respondent on behalf of the laboratory shall submit to EPA current copies (within the past twelve (12) months) of laboratory certification provided from either a State or Federal Agency which conducts certification. The certification shall be applicable to the matrices and analyses that are to be conducted. If the laboratory does not participate in the Contract Laboratory Program ("CLP"), it must submit to EPA the results of performance evaluation ("PE") samples for the constituents of concern from within the past twelve (12) months or it must complete PEs for the matrices and analyses to be conducted and the results must be submitted with the LQAP.
 - iii. The laboratories utilized for analyses of samples must perform all analyses according to approved EPA methods or, if requested by Respondent and approved by EPA, an alternate method.
 - iv. Unless indicated otherwise in the approved QAPP, upon receipt from the laboratory, all data shall be validated.
 - v. The validation package (checklist, report and Form I's containing the final data) submitted to EPA shall be prepared in accordance with the provisions of subparagraph vi. below as part of the RI Report submittal.
 - vi. Respondent shall assure that all analytical data that are validated as required by the QAPP are validated according to the latest version of EPA Region 2 data validation Standard Operating Procedures. Region 2 Standard Operating Procedures are available at:
<http://www.epa.gov/region02/qa/documents.htm>,

- vii. Unless indicated otherwise in the QAPP, Respondent shall require deliverables equivalent to CLP data packages from the laboratory for analytical data. Upon EPA's request, Respondent shall submit to EPA the full documentation (including raw data) for this analytical data. EPA reserves the right to perform an independent data validation, data validation check, or qualification check on generated data.
- viii. Respondent shall insert a provision in its contract(s) with the laboratory utilized for analyses of samples that requires granting access to EPA personnel and authorized representatives of the EPA for the purpose of ensuring the accuracy of laboratory results related to the Site.

- 3. A Health and Safety Plan (HSP) or update to a previously approved HSP, which shall conform to 29 CFR §1910.120, "OSHA Hazardous Waste Operations Standards," and the EPA guidance document, "Standard Operating Safety Guidelines" (OSWER, 1988). EPA does not approve HSPs.

C. EPA will approve the Phase 1 RI Work Plan or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.

III. TASK 2 - COMMUNITY RELATIONS

To the extent requested by EPA, Respondent shall provide information relating to the work required hereunder for EPA's use in developing and implementing a Community Involvement Plan. As requested by EPA, Respondent shall participate in the preparation of appropriate information disseminated to the public; and participate in public meetings which may be held or sponsored by EPA.

IV. TASK 3 - IMPLEMENTATION OF PHASE I OF THE RI

A. Following EPA's approval or modification of the Phase 1 RI Work Plan pursuant to Section XI of the Settlement Agreement, Respondent shall implement Phase 1 of the RI in accordance with the requirements of the approved Phase 1 RI Work Plan. Respondent shall notify EPA at least seven (7) days in advance of the field work regarding the planned dates for field activities.

B. Respondent shall provide EPA with validated analytical data within seventy-five (75) days after each sampling activity. Additionally, if requested by EPA, Respondent shall make all data available to EPA upon receipt from the lab (prior to validation). All data submitted to EPA shall be compiled in a database format or spreadsheet acceptable to EPA and shall show the location, medium and results for each sample.

V. TASK 4 - SITE CHARACTERIZATION SUMMARY REPORT

A. Within sixty (60) days after submission to EPA of the final set of validated data from Phase 1 of the RI, or such longer time as specified or agreed to by EPA, Respondent shall submit to EPA a Site Characterization Summary Report (“SCSR”) for the Drainageways. The overall objective of site characterization is to describe areas of the WD and SD that may pose a threat to human health or the environment. This shall be accomplished by determining the Site’s physiography, geology, and hydrology. Potential surface and subsurface pathways of migration and locations of contaminant reservoirs shall be defined. Respondent shall identify the sources of contamination and characterize the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as their concentrations at incremental locations relative to background concentrations in the affected media. Potential contaminant degradation processes shall be evaluated. Using this information, contaminant fate and transport shall be estimated. The data shall be discussed and shall be summarized in graphical and tabular form. Relevant physical information (e.g., the presence of free phase material) and information regarding the fate and transport of chemical constituents shall be summarized.

For the SCSR, all available existing data for the WD and SD components of the Site shall be thoroughly compiled, reviewed and summarized by Respondent. These data include, but are not limited to, the results of Phase 1 of the RI, the results of previous investigations of the Site as they relate to the WD and SD, historical information about the Site as it relates to the WD and SD, including aerial photographs, and other available information. Any data that cannot be obtained from the New York State Department of Environmental Conservation (“NYSDEC”) or other governmental agencies in time to be included in the SCSR shall be submitted to EPA upon receipt and, depending on when the data are received, incorporated into the SCSR Addendum. Respondent shall provide EPA with a detailed description of the efforts made to obtain the relevant data from the NYSDEC and other governmental agencies and the results of said efforts.

The compiled spreadsheets, maps, graphs, and figures shall include a compilation of stream flow data and a summary, as well as an electronic data base of all available sampling data from the WD and SD (with coordinates and sampling dates) for soil, sediment, surface water, fish, and other biota. The SCSR shall also include, but not be limited to, the following information for the WD and SD:

1. Introduction and background information, including a summary of all historical investigations and remediation actions;
2. Results of field reconnaissance, including mapped geomorphologic features;
3. Summary of sampling activities conducted as part of Phase 1 of the RI;
4. Figures developed from the mapping, including the surveyed sampling locations and GIS layers;

5. Tables summarizing the sample descriptions and validated analytical results from the Phase 1 RI samples;
6. Copies of the field notes;
7. Representative photographs from the field reconnaissance efforts;
8. Updated results from Respondent's fish and surface water sampling programs;
9. Preliminary conceptual site model ("CSM") for the WD and SD; and
10. Copies of Data Usability Summary Reports presenting the results of validated data.

In addition, the SCSR shall identify any additional data necessary to complete the RI/FS for the Drainageways.

B. Within thirty (30) days after Respondent's submittal of the SCSR, or such longer time as specified in writing by EPA, Respondent shall make a presentation to EPA and the State on the findings of the SCSR. EPA will approve the SCSR or otherwise respond pursuant to Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement. When approved by EPA, the SCSR shall be incorporated into the RI Report for the Drainageways which is to be prepared in accordance with this SOW.

VI. TASK 5 – PHASE 2 RI/FS WORK PLAN

A. Phase 2 RI/FS Work Plan and Schedule. Within sixty (60) days after EPA's approval of the SCSR, Respondent shall submit to EPA a detailed Phase 2 RI/FS Work Plan for the completion of the RI/FS for the Drainageways. The SCSR shall be used for planning the Phase 2 RI/FS Work Plan. The Phase 2 RI/FS Work Plan shall include, among other things, a detailed description and schedule for Phase 2 of the RI and the FS.

The Phase 2 RI/FS Work Plan shall supplement existing data and propose appropriate investigations to satisfy the identified data gaps in current understanding of the sources of contamination, nature and extent of the contamination, and Site characteristics as they relate to the WD and SD in accordance with the following general requirements:

1. Define Sources of Contamination.

Respondent shall locate each source of contamination in each media. For each location associated with the Site other than the locations being investigated pursuant to the Administrative Settlement Agreement and Order on Consent for Remedial Investigation and Feasibility Study of Landfill and Groundwater, Index No. CERCLA-02-2013-2008, the areal extent and depth of contamination shall be determined by sampling at incremental depths on a sampling grid or other appropriate sampling locations or by other sampling means, as defined in the Phase 2 RI/FS

Work Plan. The physical characteristics and chemical constituents and their concentrations shall be determined for all such known and discovered sources of contamination. Respondent shall conduct sufficient sampling to define the boundaries of such contaminant sources for the WD and SD to the level established in the QAPP and Data Quality Objectives (“DQOs”).

Defining the source(s) of contamination shall include analyzing the potential for contaminant release, contaminant mobility and persistence, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

2. Describe the Nature and Extent of Contamination.

Respondent shall gather information to describe the nature and extent of contamination in the Drainageways during the field investigation. To describe the nature and extent of contamination, Respondent shall utilize the information on the Site’s physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated, to what extent they have migrated, and their potential to migrate further. Respondent shall then implement a monitoring program and any other study program identified in the Phase 2 RI/FS Work Plan (which includes the QAPP) such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants in all media, the amount of contaminant degradation occurring and the migration of contaminants through the various media at the Site can be determined. In addition, Respondent shall gather data for calculations of contaminant fate and transport. This process shall continue until the area and depth of contamination are known to the level of contamination established in the QAPP and DQOs. The information on the nature, extent and migration potential of contamination shall be used to determine the level of risk presented by the Drainageways at the Site. Respondent shall use this information to help to determine aspects of the appropriate remedial action alternatives to be evaluated.

3. Evaluate Site Characteristics.

Respondent shall analyze and evaluate the data for the Drainageways to: (1) describe physical and biological characteristics, (2) describe contaminant source characteristics, (3) determine the nature and extent of contamination, (4) determine the contaminant fate and transport; and as necessary develop site-specific human health and ecological risk assessments. Results of the Site’s physical characteristics, source characteristics, and extent and mobility of contamination analyses shall be utilized in the analysis of contaminant fate and transport. The evaluation shall include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming,

including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. Models proposed to be used shall be subject to EPA's approval and shall be utilized in accordance with Section VI.D below. Analysis of data collected for characterization of the Site shall meet the DQOs developed in the QAPP (or as revised during the RI).

B. The Phase 2 RI/FS Work Plan shall also address, but not be limited to, the following investigations:

1. Sampling to define the nature and extent of sediment and soil contamination in the WD, including associated floodplain or shoreline;
2. Collection of high resolution cores in Nassau Lake to determine historical contamination trends and current recovery trends for the system;
3. Any revisions to the fish collection plan included in the Phase 1 RI Work Plan;
4. Sampling of other biota if necessary;
5. A PCB volatilization study near and around Nassau Lake if necessary; and
6. In the event that data gaps remain after Phase 1 of the RI in defining the nature and extent of sediment and soil contamination in the SD, including the associated floodplain or shoreline, sampling to fill those data gaps.

C. Data Management Procedures. Respondent shall consistently document the quality and validity of field and laboratory data compiled during the RI through the procedures set forth in Section II.B.1 above.

D. Fate and Transport Model Memorandum. At EPA's request, Respondent shall submit a memorandum on a fate and transport model for the Drainageways, unless it can demonstrate to EPA's satisfaction that such a model is unnecessary. If EPA determines that a fate and transport model is required and so notifies Respondent, Respondent shall, within ninety (90) days thereafter or such longer period as is specified or agreed to by EPA, submit the memorandum on the model. EPA will approve the memorandum or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.

E. Reuse Assessment. At EPA's request, Respondent shall perform a Reuse Assessment. If EPA determines that a Reuse Assessment is required and so notifies Respondent, Respondent shall, within forty-five (45) days thereafter, submit a Reuse Assessment Report. The Reuse Assessment Report should provide sufficient information to develop realistic assumptions of the reasonably anticipated future uses for the Drainageways. Respondent shall prepare the Reuse Assessment Report in accordance with EPA guidance including, but not limited to, "Reuse Assessment: A Tool to Implement the Superfund Land Use Directive," OSWER Directive 9355.7-06P, June 4, 2001, or subsequently issued guidance. EPA will approve the Reuse

Assessment Report or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.

F. The Phase 2 RI/FS Work Plan shall also include the following:

1. A QAPP or update to a previously approved QAPP, which shall meet the following requirements:
 - a. The QAPP or QAPP update shall meet all the requirements specified in Section II.B.2 above, with the exception of those in subsection II.B.2.b.
 - b. The QAPP or QAPP update shall provide for collection of data sufficient to: (i) delineate site-related contamination in potentially affected media in or affecting the Drainageways, to the extent necessary to select an appropriate remedy for the Drainageways; (ii) evaluate cross-media contaminant transport relevant to the Drainageways as necessary to support the assessment of risks associated with potential or actual exposures to site-related contamination in the Drainageways under current and reasonably likely future conditions; and (iii) evaluate remedial alternatives for the Drainageways that address site-related contamination (for example, sufficient engineering data for the projection of contaminant fate and transport and development and screening of remedial action alternatives, including information to assess treatment technologies).
2. A HSP or update to a previously approved HSP, which shall conform to 29 CFR §1910.120, "OSHA Hazardous Waste Operations Standards," and the EPA guidance document, "Standard Operating Safety Guidelines" (OSWER, 1988). EPA does not approve HSPs.
3. A Stage 1A Cultural Resources Survey ("CRS") to address the requirements of the National Historic Preservation Act (see CERCLA Compliance with Other Laws Manual: Part II: Clean Air Act and Other Environmental Statutes and State Requirements, OSWER Directive 9234.1-02, August 1989, available at www.epa.gov/superfund/policy/remedy/pdfs/540g-89009-s.pdf). Should EPA determine after a review of the recommendations contained in the Stage 1A CRS that additional cultural resource investigations (Stage 1B CRS, Stage 2 CRS, etc.) will be necessary, Respondent shall submit a detailed CRS Work Plan for EPA approval prior to commencing the additional investigations.

G. EPA will approve the Phase 2 RI/FS Work Plan or otherwise respond in accordance with Section XI (Reporting and EPA Approval of Submissions) of the Settlement Agreement.

VII. TASK 6 – IMPLEMENTATION OF THE PHASE 2 RI/FS WORK PLAN

A. Following EPA's written approval or modification of the Phase 2 RI/FS Work Plan pursuant to Section XI of the Settlement Agreement, Respondent shall implement the provisions

of the Phase 2 RI/FS Work Plan. Respondent shall notify EPA at least fourteen (14) days in advance of the field work regarding the planned dates for field activities.

B. Respondent shall provide EPA with validated analytical data within seventy-five (75) days after each sampling activity. Additionally, if requested by EPA, Respondent shall make all data available to EPA upon receipt from the lab (prior to validation). All data submitted to EPA shall be compiled in a database format or spreadsheet acceptable to EPA and shall show the location, medium and results for each sample.

C. Within seven (7) days after completion of each phase of field activities, Respondent shall so advise EPA in writing.

D. Within sixty (60) days after submission to EPA of the final set of validated data, or such longer time as is specified or agreed to by EPA, Respondent shall submit to EPA an SCSR Addendum. Within thirty (30) days after Respondent's submittal of the SCSR Addendum, or such longer time as specified in writing by EPA, Respondent shall make a presentation to EPA and the State on the findings of the SCSR Addendum. EPA will approve the SCSR Addendum or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement. When approved by EPA, the SCSR Addendum shall be incorporated into the final RI Report when it is completed.

E. Respondent shall provide a monthly progress report and participate in meetings with EPA at major milestones in the RI/FS process, as described herein at Section V (Task 4 - Site Characterization Summary Report); Section VII (Task 6.D - Site Characterization Summary Report Addendum); Section XII (Task 11.B, Development and Screening of Remedial Alternatives Technical Memorandum); and Section XIII (Task 12.A, Feasibility Study Report).

VIII. TASK 7 - IDENTIFICATION OF CANDIDATE TECHNOLOGIES

An Identification of Candidate Technologies Memorandum shall be submitted by Respondent within forty-five (45) days after Respondent's submission to EPA of the last set of final validated analytical data. The candidate technologies identified shall include innovative treatment technologies (as defined in the RI/FS Guidance) where appropriate. The listing of candidate technologies shall cover the range of technologies required for alternatives analysis. Respondent shall conduct a literature survey to gather information on performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies.

EPA will approve the Identification of Candidate Technologies Memorandum or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement. If EPA determines that practical candidate technologies have not been sufficiently demonstrated, or cannot be adequately evaluated for this Site on the basis of available information, EPA may require that treatability testing be conducted as described in Section IX (Task 8: Treatability Studies; as necessary).

IX. TASK 8 - TREATABILITY STUDIES; AS NECESSARY

Treatability testing shall be performed by Respondent, as necessary, to assist in the detailed analysis of alternatives. Once a decision has been made to perform treatability studies, the following activities shall be performed by Respondent.

A. Evaluate Treatability Studies. EPA, with input from Respondent, will decide on the type of treatability testing to use (e.g., bench versus pilot). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS.

B. Treatability Testing Work Plan. Within ninety (90) days after EPA's written determination that treatability testing is necessary and the decision on the type of treatability testing to be used is made, Respondent shall submit a Treatability Testing Work Plan, including a field sampling and analysis plan and a schedule. The Treatability Testing Work Plan shall describe the background of the Site, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing should be documented as well. If pilot scale treatability testing is to be performed, the Work Plan shall include a description of pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-Site, Respondent shall address all necessary permitting requirements to the satisfaction of appropriate authorities.

EPA will approve the Treatability Testing Work Plan or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.

C. Treatability Testing QAPP. If the original QAPP is not adequate for defining the activities to be performed during the treatability test, a separate Treatability Testing QAPP, or amendment to the original QAPP for the Site, shall be prepared by Respondent for EPA review and approval, and shall be submitted at the same time as the Treatability Testing Work Plan. EPA will approve the Treatability Testing QAPP or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.

D. Treatability Testing HSP. If the original HSP is not adequate for defining the activities to be performed during the treatment tests, a separate or amended HSP will be developed by Respondent and submitted for EPA review and comment. Section II.B.3 provides additional information on the requirements of the health and safety plan. EPA does not approve HSPs.

E. Treatability Testing Evaluation Report. Within forty-five (45) days after completion of any treatability testing (including field work and receipt of all laboratory results, including validated laboratory results if data validation is required), Respondent shall submit a Treatability

Testing Evaluation Report to EPA. The Treatability Testing Evaluation Report shall analyze and interpret the treatability testing results. Depending on the sequences of activities, this report may be a part of the RI/FS Report or a separate deliverable. The report shall evaluate each technology's effectiveness, implementability, cost and actual results as compared with predicted results. The report shall also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

F. EPA will approve the Treatability Testing Evaluation Report or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.

X. TASK 9 - BASELINE RISK ASSESSMENT

Respondent shall prepare a Baseline Risk Assessment for the Drainageways which shall be incorporated by Respondent into the RI. Respondent shall provide EPA with the following deliverables:

- A. Baseline Human Health Risk Assessment ("BHHRA")
 - 1. Potential current and future cancer risks and non-cancer hazards to human health under current and reasonably anticipated future land uses shall be identified and characterized in accordance with CERCLA, the NCP, and EPA guidance documents including, but not limited to, the RI/FS Guidance, "Land Use in the CERCLA Remedy Selection Process" (OSWER Directive No. 9355.7-04), "Reuse Assessments: A Tool to Implement the Superfund Land Use Directive" (OSWER 9355.7-04, June 2001), and the definitions and provisions of "Risk Assessment Guidance for Superfund ("RAGS")," Volume 1, "Human Health Evaluation Manual," (December 1989) (EPA/540/1-89/002) and updates (RAGS Parts B, C, D, E, F and Part III available at: http://www.epa.gov/oswer/riskassessment/risk_superfund.htm). Other EPA guidance documents to be used in the development of risk assessments are identified in Attachment 1 to this SOW.
 - 2. Memorandum on Exposure Scenarios and Assumptions

Within sixty (60) days after approval or modification of the RI/FS Work Plan pursuant to Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement or such longer time as specified or agreed to by EPA, Respondent shall submit a Memorandum describing the exposure scenarios and assumptions for the BHHRA, taking into account the current and reasonably anticipated future use of the Drainageways at the Site based on Site conditions at the time the Memorandum is prepared. The Memorandum should include appropriate text describing the conceptual site model and exposure routes of concern for the Drainageways at the Site, and include a completed RAGS Part D Table 1. This table shall describe the pathways that will be evaluated in the

BHHRA, the rationale for their selection, and a description of those pathways that will not be evaluated and the rationale for excluding these pathways. In addition, the Memorandum shall include a completed RAGS Part D Table 4 describing the exposure pathway parameters with appropriate references to EPA's 1991 Standard Default Assumptions, the Supplemental Guidance for Developing Soil Screening Levels for Superfund sites (2002) and updates to this guidance developed by the EPA Superfund Program, or, where other, site-specific exposure assumptions are proposed, a detailed rationale and supporting basis for those assumptions, to be presented for EPA review and approval. In the event that chemicals with a mutagenic mode of action are identified (as described in USEPA 2005a,b and the Handbook for Implementing the Supplemental Cancer Guidance at Waste and Cleanup Sites [<http://www.epa.gov/oswer/riskassessment/sghandbook/chemicals.htm>], specific exposure assumptions for age groups 1 to younger than 16 shall be developed and submitted to EPA for evaluation and approval.

EPA will approve the Memorandum or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.

3. Pathway Analysis Report ("PAR")

Respondent shall prepare and submit a PAR within sixty (60) days after Respondent's submission to EPA of the last set of validated data or EPA's approval of the Memorandum on Exposure Scenarios and Assumptions, whichever is later. The PAR shall be developed in accordance with OSWER Directive 9285.7-01D dated January 1998 (or more recent version), entitled, "Risk Assessment Guidelines for Superfund Part D" and other appropriate guidance in Attachment 1 and updated thereto. The PAR shall contain the information necessary for a reviewer to understand how the risks due to the Drainageways at the Site shall be assessed. The PAR shall build on the Memorandum on Exposure Scenarios and Assumptions (see Section X.A.2 above) describing the risk assessment process and how the risk assessment shall be prepared. The PAR shall include completed RAGS Part D Tables 2, 3, 5, and 6 as described below. EPA will approve the PAR or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement. The PAR must be reviewed and approved by EPA prior to the submission of the BHHRA. The following information shall be included in the PAR:

- a. Chemicals of Potential Concern ("COPCs"). The PAR shall contain all the information necessary for a reviewer to understand how the risks from the Drainageways at the Site will be evaluated.

Based on the validated analytical data, Respondent shall list the hazardous substances present in all sampled media (e.g., soils, sediment, etc.) excluding the LF and GW, and the COPCs as described in RAGS Part A.

- b. Table 2 - Selection of COPCs. COPCs for the Drainageways and associated concentrations in sample media for the PAR shall be determined utilizing all currently available media-specific validated analytical data generated during the RI/FS. The selection of COPCs shall follow RAGS Part A; and before hazardous substances are eliminated as COPCs, they shall be evaluated against the residential and industrial screening levels in accordance with the current version of the “Regional Screening Levels for Chemical Contaminants at Superfund Sites” screening level/preliminary remediation goal website (http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm). The industrial screening level shall not be used as a basis for eliminating any hazardous substance as a COPC. In addition, background shall not be used as a basis to exclude COPCs. The COPCs shall be presented in completed RAGS Part Table 2 format.
- c. Table 3 - Media Specific Exposure Point Concentrations. Using the COPCs selected in Table 2, this Table shall summarize the Exposure Point Concentrations (“EPCs”) for all COPCs for the various media at the Drainageways. The calculation of the EPC shall follow the Supplemental Guidance to RAGS: Calculating the Concentration Term (1992), using EPA’s ProUCL 4.1.00 Software or later versions (<http://www.epa.gov/osp/hstl/tsc/software.htm>), which evaluates the distribution of the data using Shapiro-Wilk’s and Lilliefors’s tests, in accordance with 2010 ProUCL’s User’s Guide (available at: http://www.epa.gov/osp/hstl/tsc/ProUCL_v4.1_user.pdf) and provides recommendations for EPCs, unless Respondent has previously proposed and EPA has approved use of another statistical technique for calculating the 95% Upper Confidence Limit (“UCL”) on the mean of the data. In those cases where the 95% UCL exceeds the maximum, the maximum concentration shall be used as the EPC.
- d. Tables 5 and 6 - Toxicological Information. This section of the PAR shall provide the toxicological data (e.g., Cancer Slope Factors, Inhalation Unit Risk Factors, Reference Doses, Reference Concentrations, Weight of Evidence Classifications for Carcinogens, and adjusted dermal toxicological factors where appropriate) for the COPCs. Chemicals with a mutagenic mode of action need to be identified in Tables 5 and 6 consistent with the EPA Cancer Guidelines (USEPA, 2005a), Supplemental Guidance for Assessing Susceptibility from Early Life Exposure to Carcinogens (USEPA, 2005b), and Handbook for Implementing the Supplemental Cancer Guidance at Waste and Cleanup

Sites (available at:

<http://www.epa.gov/oswer/riskassessment/sghandbook/chemicals.htm>

The toxicological data shall be presented in completed RAGS Part D Tables 5 and 6. The sources of data in order of priority, based on the 2003 OSWER Directive 9285.7-53, are:

- Tier 1 – Integrated Risk Information System (“IRIS”) database (EPA, 2007).
- Tier 2 – Provisional Peer Reviewed Toxicity Values (“PPRTV”) – The Office of Research and Development/National Center for Environmental Assessment/Superfund Health Risk Technical Support Center (“STSC”) develops PPRTVs on a chemical specific basis when requested by EPA’s Superfund program. Provisional values shall either be obtained from the PPRTV webpage available at: <http://hhpprtv.ornl.gov/>, the “Regional Screening Levels for Chemical Contaminants at Superfund Sites,” or from Region 2.
- Tier 3 – Other Toxicity Values – Tier 3 includes additional EPA and non-EPA sources of toxicity information. Priority shall be given to those sources of information that are the most current, the basis for which is transparent and publicly available and which have been peer reviewed. Tier 3 values include toxicity values obtained from the California Environmental Protection Agency (“Cal EPA”) available at: <http://www.oehha.ca.gov/risk/chemicalDB/index.asp>., Agency for Toxic Substances and Disease Registry’s (“ATSDR’s”) Minimum Risk Levels (“MRLs”), and toxicity values obtained from the HEAST (EPA 1997b).

To facilitate a timely completion of the PAR, Respondent shall submit a list of chemicals for which IRIS values are not available to EPA as soon as identified thus allowing EPA to facilitate obtaining this information from EPA’s National Center for Environmental Assessment.

4. Baseline Human Health Risk Assessment Reporting.

Within seventy-five (75) days after EPA’s approval of the PAR, Respondent shall submit to EPA a Baseline Human Health Risk Assessment (“BHHRA”) for inclusion in the RI. The submittal shall include completed RAGS Part D Tables 7 through 10 summarizing the calculated cancer risks and non-cancer hazards and appropriate text in the risk characterization with a discussion of uncertainties and critical assumptions (e.g., background concentrations and conditions). Respondent shall perform the BHHRA in accordance with the approach and parameters described in the Memorandum of Exposure Scenarios and Assumptions and the PAR, as described above, including a discussion of uncertainties and other qualifications (if any). Text and tables from these reports

previously reviewed by EPA shall be included in the appropriate sections of the BHHRA.

EPA will approve the BHHRA or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement. Upon approval by EPA, the BHHRA shall be incorporated into the RI Report.

B. Baseline Ecological Risk Assessment

1. Within sixty (60) days after Respondent's submission to EPA of the last set of final validated analytical data, or upon agreement of the parties that sufficient data exists, or at such other time as is specified or agreed to by EPA, Respondent shall submit a Screening Level Ecological Risk Assessment ("SLERA") in accordance with current Superfund ecological risk assessment guidance (Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments ("ERAGS"), USEPA, 1997 [EPA/540-R-97-006], OSWER Directive 9285.7-25, June 1997)). The SLERA shall include a comparison of the 95% UCL and maximum contaminant concentrations in each medium of concern for the Drainageways to appropriate conservative ecotoxicity screening values for such medium (if any), and should use conservative exposure estimates for the ecological receptors, considering site-specific conditions. The SLERA shall also include a recommendation as to whether the conduct of a full Baseline Ecological Assessment should be considered by EPA. EPA will approve the SLERA or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.
2. If EPA determines that a full Baseline Ecological Risk Assessment ("BERA") is required, and so notifies Respondent in writing, Respondent shall, within sixty (60) days thereafter or such longer time as specified or agreed to by EPA, submit a Scope of Work outlining the steps and data necessary to perform the BERA, including any amendments to the Phase 2 RI/FS Work Plan required to collect additional relevant data. The BERA Scope of Work shall identify any Phase 2 RI/FS Work Plan amendments or addenda, including establishment of a schedule for review and approval of additional field work, subject to EPA approval pursuant to Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement. EPA will approve the BERA Scope of Work or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.
3. Respondent shall notify EPA in writing within seven (7) days after completion of all field activities associated with the BERA, as identified in the BERA Scope of Work and performed under the approved Phase 2 RI/FS Work Plan addenda. Within sixty (60) days after submission to EPA of the final set of BERA-related validated data or such longer time as specified or agreed to by EPA, Respondent shall submit a BERA Report to EPA for inclusion in the RI Report. Actual and

potential ecological risks shall be identified and characterized in accordance with CERCLA, the NCP, and EPA guidances including, but not limited to, "Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments," (1997) (EPA/540-R-97-006), ERAGS, dated June 5, 1997 (or most recent guidance). Respondent shall evaluate and assess the risk to the environment posed by contaminants. As part of this subtask, Respondent shall perform the following activities:

- a. Respondent shall prepare a BERA Report that addresses the following:
 - i. Hazard Identification (sources). Respondent shall review available information on the hazardous substances present in the Drainageways at the Site and identify the major contaminants of concern.
 - ii. Dose-Response Assessment. Respondent shall identify and select contaminants of concern based on their intrinsic toxicological properties.
 - iii. Characterization of Site and Potential Receptors. Respondent shall identify and characterize environmental exposure pathways and the assessment endpoints, and develop an integrated ecological conceptual model. The conceptual model shall include a contaminant fate-and-transport diagram that traces the contaminants' movement from sources through the ecosystem to receptors that include the assessment endpoints.
 - iv. Select Chemicals, Indicator Species, and Endpoints. In preparing the assessment, Respondent shall select representative chemicals and indicator species (species which are especially sensitive to environmental contaminants) to represent the assessment endpoints and measurement endpoints on which to concentrate.
 - v. Exposure Assessment. The exposure assessment shall identify the magnitude of actual or potential environmental exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed, considering the results of any field studies conducted to measure exposures to ecological receptors. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, Respondent shall develop reasonable maximum estimates of exposure for both current land use conditions and reasonably anticipated future land use conditions as they pertain to ecological habitats at the Site.

- vi. Toxicity Assessment/Ecological Effects Assessment. The toxicity and ecological effects assessment shall address the types of adverse environmental effects on survival, growth, and reproduction associated with chemical exposures, the relationships between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity. If field studies are conducted to assess such effects on ecological receptors, the toxicity and ecological effects assessment shall include an evaluation of whether those studies showed adverse effects on survival, growth, or reproduction attributable to the contaminants studied and at what levels, as well as the uncertainties in the study results.
 - vii. Risk Characterization. During risk characterization, chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment (which may include site-specific field studies) shall be compared to measured levels of contaminant exposure and/or the levels predicted through environmental fate and transport modeling. Alternatively, if site-specific field studies are conducted to assess potential ecological risks, the results of those studies shall be evaluated to characterize the risks to the ecological receptors studied. Consistent with EPA guidance (e.g., "Ecological Risk Assessment and Risk Management Principles for Superfund Sites," OSWER Directive 9285.7-28P, October 1999), the risk characterization shall focus on potential site-specific risks to local populations and communities of biological receptors. These evaluations shall determine whether concentrations of contaminants at or released from the Drainageways are affecting or could potentially affect the environment.
 - viii. Identification of Limitations/Uncertainties. Respondent shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.
 - ix. Conceptual Site Model. Based on contaminant identification, exposure assessment, toxicity assessment, and risk characterization, Respondent shall revise the preliminary CSM discussed in Section V.A. of this SOW, as appropriate.
- b. EPA will approve the BERA Report or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement. Upon approval by EPA, the BERA Report shall be incorporated into the RI Report.

XI. TASK 10 - REMEDIAL INVESTIGATION REPORT

Within sixty (60) days after EPA approval of the BHHRA Report, the SLERA Report, or the BERA Report (if required), whichever is latest, Respondent shall prepare and submit an RI Report that accurately establishes the site characteristics for the SD and the WD, including, but not limited to, identification of the contaminated media, and the potential for the contamination to migrate further, the degree to which contaminant degradation is occurring, and the physical boundaries of the contamination. This report shall summarize results of field activities to characterize the Site, sources of contamination, and the fate and transport of contaminants. Pursuant to this objective, Respondent shall obtain only the minimum essential amount of detailed data necessary to determine the key contaminants movement and extent of contamination. The key contaminants shall be selected based on persistence and mobility in the environment and the degree of hazard. Respondent shall use existing standards and guidelines such as drinking water standards, water quality criteria and other criteria accepted by EPA as appropriate for the situation, which shall be used to evaluate effects on human and ecological receptors that may be exposed to the key contaminants above appropriate standards or guidelines. The RI Report shall incorporate information presented in the approved SCSR including all addenda, the BHHRA Report, the SLERA Report, and, if required, the BERA Report.

The RI Report shall be written in accordance with the "Guidance for Conducting Remedial Investigations/Feasibility Studies under CERCLA," OSWER Directive 9355.3-01, October 1988, Interim Final (or latest revision) and "Guidance for Data Usability in Risk Assessment," (EPA/540/G-90/008), September 1990 (or latest revision). Respondent shall refer to the RI/FS Guidance for an outline of the report format and contents.

EPA will approve the RI Report or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.

XII. TASK 11 – FEASIBILITY STUDY - DEVELOPMENT AND SCREENING OF REMEDIAL ALTERNATIVES

Concurrently with the RI site characterization work described in Sections VI and VII (Tasks 5 and 6 of this SOW), Respondent shall begin to develop and evaluate remedial action objectives for the WD and SD that at a minimum ensure protection of human health and the environment. The development and screening of remedial alternatives shall identify and develop an appropriate range of remedial action objectives. This range of alternatives shall include the following: 1) options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, including, at a minimum, the principal threats posed by the Site, but that vary in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed; 2) options involving containment with little or no treatment; 3) options involving both treatment and containment; 4) options that remove or destroy waste; 5) innovative technologies to the extent practicable; and 6) a no-action alternative. The following activities shall be performed as a function of the development and screening of remedial alternatives.

A. Development and Screening of Remedial Alternatives

1. Develop Remedial Action Objectives

Respondent shall develop remedial action objectives, which are medium-specific goals for protecting human health or the environment that specify the chemicals of concern (“COCs”), exposure route(s) and receptor(s) and preliminary remediation goals (“PRGs”).

2. Develop General Response Actions

Respondent shall develop general response actions for each medium of interest defining containment, treatment, excavation, pumping, or other actions, singly or in combination to satisfy the remedial action objective.

3. Identify Areas or Volumes of Media

Respondent shall identify areas or volumes of media to which general response actions may apply, taking into account requirements for protectiveness as identified in the remedial action objectives. The chemical and physical characterization of the Site shall also be taken into account.

4. Assemble and Document Alternatives

Respondent shall assemble selected representative technologies into alternatives for each affected medium or operable unit.

Together, all of the alternatives shall represent a range of treatment, removal, and containment combinations that will address the Drainageways at the Site. A summary of the assembled alternatives and their related action-specific ARARs shall be prepared by Respondent for inclusion in the Development and Screening of Remedial Alternatives Technical Memorandum.

The reasons for eliminating alternatives during the preliminary screening process must be specified.

5. Refine Alternatives

Respondent shall refine the remedial alternatives to identify contaminant volume addressed by the proposed process and sizing of critical unit operations as necessary. Sufficient information shall be collected for an adequate comparison of alternatives. PRGs for each chemical in each medium shall also be modified as necessary to incorporate any new risk assessment information presented in the baseline risk

assessment report. Additionally, action-specific ARARs shall be updated as the remedial alternatives are refined.

6. Conduct and Document Screening Evaluation of Each Alternative

Respondent may perform a final screening process based on short and long term aspects of effectiveness, implementability, and relative cost. Generally, this screening process is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening shall preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives shall include options that use treatment technologies and permanent solutions to the maximum extent practicable.

B. Development and Screening of Alternatives Deliverables. Within sixty (60) days after the later of (a) EPA's approval of the BHHRA Report, the SLERA Report, or (if required) the BERA Report (whichever is latest) or (b) EPA's approval of Respondent's Treatability Testing Evaluation Report(s) (if treatability studies are undertaken), or such longer time as is specified or agreed to by EPA, Respondent shall submit a Development and Screening of Remedial Alternatives Technical Memorandum summarizing the work performed in, and the results of, each task in Section XII.A above, including an alternatives array summary. The Memorandum shall also summarize the reasoning employed in screening, arraying alternatives that remain after screening, and identifying the action-specific ARARs for the alternatives that remain after screening. The Memorandum shall also provide an explanation for choosing any institutional or engineering controls as part of any remedial alternative, and the level of effort that will be required to secure, maintain, and enforce the control. Within twenty-one (21) days after submission of the Memorandum, Respondent shall make a presentation to EPA identifying the remedial action objectives and summarizing the development and preliminary screening of remedial alternatives. EPA will approve the Memorandum or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.

C. Detailed Analysis of Remedial Alternatives. The detailed analysis shall be conducted by Respondent to provide EPA with the information needed to allow for the selection of a remedy for the Drainageways. This analysis is the final task to be performed by Respondent during the Feasibility Study ("FS").

1. Detailed Analysis of Alternatives

Respondent shall conduct a detailed analysis of alternatives, which shall consist of an analysis of each option against a set of nine evaluation criteria as set forth in 40 C.F.R. § 300.430(e)(9)(iii) and a comparative analysis of all options using the same evaluation criteria as a basis for comparison.

2. Apply Nine Criteria and Document Analysis

Respondent shall apply the nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria are: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) cost; (8) State (or support agency) acceptance; and (9) community acceptance.

For each alternative, Respondent shall provide: (1) a description of the alternative that outlines the remedial strategy involved and identifies the key ARARs associated with each alternative, and (2) a discussion of the individual criterion assessment. If Respondent does not have direct input on criteria (8) State (or support agency) acceptance and (9) community acceptance, these criteria will be addressed by EPA.

3. Compare Alternatives Against Each Other and Document the Comparison of Alternatives

Respondent shall perform a comparative analysis between the remedial alternatives. That is, each alternative will be compared against the others using the nine evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. Respondent shall incorporate the results of the comparative analysis in the FS Report.

XIII. TASK 12 - FEASIBILITY STUDY REPORT

A. Respondent shall prepare an FS Report consisting of a detailed analysis of the remedial alternatives, in accordance with the NCP as well as the most recent guidance. Within sixty (60) days after EPA's approval of the Development and Screening of Remedial Alternatives Technical Memorandum or the final RI Report, whichever is later, or such longer time as is specified or agreed to by EPA, Respondent shall submit to EPA an FS Report which reflects the findings in the approved Baseline Risk Assessment. Respondent shall refer to the Phase 2 RI/FS Work Plan and the RI/FS Guidance and this SOW for report content and format. Within fourteen (14) days after submission of the FS Report, Respondent shall make a presentation to EPA and the State at which Respondent shall summarize the findings of the FS Report and discuss EPA's preliminary comments and concerns, if any, associated with the FS Report.

B. The FS report shall include the following:

1. Summary of Feasibility Study objectives;
2. Summary of remedial action objectives;
3. Articulation of general response actions;
4. Identification and screening of remedial technologies;
5. Descriptions of remedial alternatives;
6. Detailed analysis of remedial alternatives, and
7. Summary and conclusion.

Respondent's technical feasibility considerations shall include the careful study of any problems that may prevent a remedial alternative from mitigating site problems. Therefore, the site characteristics from the RI must be kept in mind as the technical feasibility of the alternative is studied. Specific items to be addressed are reliability (operation over time), safety, operation and maintenance, ease with which the alternative can be implemented, and time needed for implementation.

C. EPA will approve the FS Report or otherwise respond in accordance with Section XI (EPA Approval of Plans and Other Submissions) of the Settlement Agreement.